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ED 415 540

PROCEEDINGS OF THE ANNUAL MEETING OF THE ASSOCIATION FOR EDUCATION IN JOURNALISM AND MASS COMMUNICATION

(80th, Chicago, Illinois, July 30-August 2, 1997):

MEDIA MANAGEMENT and ECONOMICS

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The Case Method and Telecommunication Management Education:

A Classroom Trial

by

Anne Hoag
<amh13@psu.edu>*
Ron Rizzuto
<rrizzuto@du.edu>**
Rex Martin
<ram189@psu.edu>*

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*The Pennsylvania State University, 218 Carnegie, University Park, PA 16802
**University of Denver, 2020 Race Street, Denver, CO 80208

ABSTRACT

The Case Method and Telecommunication Management Education: A Classroom Trial

The efficacy of the case method is well known but only sometimes used in media management education. Now, as the convergence of media technologies and industries accelerates, there is a growing need for media management courses that teach across a broader array of technologies and management functions. The case method is particularly tuned to this kind of integrative experience-based learning. This paper, intended as a practical resource for educators, reviews case method literature and relates the results of a recent classroom trial in which complex telecommunication management cases were used with encouraging results.

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The Case Method and Telecommunication Management Education: A Classroom Trial

Introduction

Both student demand for media management education and instructor demand for innovative teaching tools are growing. More than ever, students express a desire to obtain skills and experience that will give them an edge in the employment marketplace. In a sense, this is a gratifying turn of events for educators. However, this places increasing pressure on educators to offer the most current, the most realistic and the most relevant lessons and to choose the most effective means of promoting practical learning.

In the age of convergence, the additional challenge in teaching media management is integration of the confusing array of new technologies and new product markets that hardly existed a few years ago. What's more, since our students are preparing for the re-engineered workplace of the 21st century, their success will depend on possessing the skill to solve simultaneous strategic problems in programming, technlogy, marketing, finance, human resources, customer service and regulation.

Currently, media management, or more particularly telecommunication management courses, are generally taught by the traditional lecture method. In the lecture method, students absorb material from (instantly dated) textbooks and other readings and from the teacher's lectures. The method has its advantages, certainly. In telecommunications, some teachers may feel lectures are the best way to transfer the same set of information on technology and policy, for examples, to every student. Lectures may be the choice when it is important that every student acquire the same facts. However, the method is limited as a means of developing problem solving reasoning.

The case method, on the other hand, is a very attractive means of learning when the subject is management. Teaching by the case method is nothing new in media management education. The efficacy of the case method is well known and media management case material that focuses on broadcasting and print media is available. However, as the convergence of media technologies and industries accelerates, there is a growing need for media management courses that link an expanding array of technologies and management functions -- on-line newspapers and marketing, direct broadcast satellite and finance, personal communication systems and organizational behavior.

Some excellent case material designed for undergraduate education exists but it focuses largely on single topics and hardly at all upon current telecommunications management issues. However, there are sophisticated and complex cases developed for executive level training in the telecommunications industry. These high level cases were adopted recently for an advanced undergraduate media management course with very positive results. The lessons of this experiment suggest the case approach deserves broader adoption in media management education.

In this paper, case method literature is briefly reviewed, currently available case material and teacher development resources are described and the results of the classroom trial are presented. The objective of this exercise is to provide the interested telecommunications management teacher with a single resource on which to build a successful case-based course.

The Case Method

In mass communications education, the case method has long been the obvious choice for subjects such as communications law, media ethics, and others where the central principles and theories can be brought to life through concrete examples. This tradition of providing students with simulations of real problems has a long history. In U. S. higher education, we think of professional education in medicine, business and law as the places where the case approach was pioneered (Merseth, 1991). Indeed, Harvard Law School first used reported court decisions as the basis for classroom instruction in the 1860s (Donham, 1922).

Business schools have long relied on the case method for its ability to demonstrate the interrelatedness of management functions. A 1931 primer on the method defines the philosophy at Harvard Business School, "[Students] realize that they are dealing with actual business situations rather than with intangible theories and that the thought, method of approach, and principles applied in reaching a decision may be used in solving similar problems later in life (Fraser, p. 6)."

Early in this century, John Dewey's pragmatist philosophy on education connected thinking as a method to the importance of *experience*. He faulted educators of the day with assuming that students had experience, that is, had the experience of "trying to do something and having the thing perceptibly do something to one in return (1916)." An experience, or empirical situation, was one that occurred outside the school. He wrote of empirical situations in the classroom, "They give the pupils something to do, not something to learn; and the doing is of such a nature as to demand thinking, or the intentional noting of connections; learning naturally results. (1916)." This philosophy is embedded in the case method.

The case method today is used in practically every discipline where theories and principles are applied in the real world. Plenty of research on its pedagogical benefits exists. Even a cursory survey of the literature and "educator" journals, yields a long list of books, essays and research articles on the subject. In the interest of brevity, the following review limits itself to a kind of annotated bibliography. Research and theory development from two disciplines in particular inform the present topic of media management education: teacher education (because teachers and managers both need leadership skills) and business/economics education (for the obvious reason that these instructors are preparing managers, as are media management teachers).

The clearly dominant source of information on the benefits of the case method in business education continues to be the Harvard Business School (HBS) (Examples are Barnes et al., 1994; Christensen et al., 1991.). The efficacy of the case approach is assumed, quite reasonably, from the long experience of HBS in successfully training managers and leaders.

Outside HBS, economics and management educators arrive at similar and reasonable conclusions. Marks and Rukstad (1996) and Velenchik (1995) believe the case method a superior way to teach the otherwise abstract theories of the economics discipline. In advocating use of the case method for education of public managers, Ejigiri and Tarver (1994), specify the areas of cognitive intellectual development for which the method is most effective. If there are six such areas, knowledge, comprehension, application, analysis, synthesis and evaluation (Bloom,1956), then the case method is best for the last three. Cases which simulate real conditions give students experience in analysis, synthesis and evaluation. And these are the skills that managers use everyday to develop alternatives and allocate scarce resources to achieve organizational goals.

In the field of teacher education, a good deal of theory development and discussion of the effectiveness of experiential learning concludes two things: That case-based teacher training requires of teachers comprehensive skill development and disciplined practice in order to be effective and secondly that, when used skillfully, its results are extraordinary (Colbert et al, 1996; McAninch, 1993; Tillman, 1995).

While the discourse concludes that case-based instruction is superior for skill development in managers and teachers, media management educators may be curious about the conclusions of empirical research on the subject as well. Masoner (1988) undertook an extensive, systematic collection and analysis of data on the efficacy of case method learning. He analyzed a variety of approaches, entailing a large set of variables, that all carry the label of case method. For example, some implementations more closely resembled Socratic discussion, others employed little classroom student-teacher interaction but used non-adversary discussion or role-playing. Some focused on general identification of applied concepts, others on specific problem solving and decisionmaking. To reduce his complex findings to their most essential, when the espoused theory of the case method is practiced, there is learning; however, it is frequently the case that the theory is not always faithfully executed.

Since the experiential learning that occurs with case study is like a simulation of real situations, Li and Baillie (1993) undertook an experiment to learn whether there were any significant differences in pedagogical effectiveness between complex games and case method for learning business policy. The conclusion was that the two models are almost interchangeable in modeling reality but that cases do enjoy one advantage; students were more interested in the real people and real companies profiled in the cases. In another quasiexperiment, researchers at a business school evaluated the quality of students' written case analyses as evidence of the volume and quality of learning in a case method course (Wolfe, 1993). The conclusions, as in the two empirical works discussed above, found that learning occurred but that other ways of teaching may be just as effective.

The de facto acceptance of the efficacy of the case method in the non-empirical literatures is somewhat tempered by the conclusions of a small number of objective investigations. As the purpose here is to inform the subject of telecommunication management education, we can look to the experience of industry-level management trainers for evidence closer to home.

Since 1983, faculty at the University of Denver's (DU) School of Business and School of Communications, have been involved in leadership and management development for the cable television industry. Cases have been the primary pedagogical method for many of these programs. Case-based programs have been developed for Jones Intercable, CableLabs, HBO, Summitomo Media Group in Japan, the National Association for Minorities in Cable (NAMIC) and Time Warner Cable (formerly American Television and Communication).

The best known management development program is the Women in Cable and Telecommunications (WICT) National Management Conference. This conference has steadily supported the use of case method since 1985. Early WICT cases focused on individual issues such as the decision to acquire a cable television system. The approach required participants to consider managerial and marketing issues as well as financial valuation. In later years, cases required participants not only to apply business tools but also grapple with the trade-offs between financial objectives and various operational/marketing/engineering/regulatory objectives. Over the year, the cases have become more complex and sophisticated so that they now encourage integrative learning across all business functions, new technologies and the new realities of competition in telecommunications. The expanding collection of cases reflect the current issues with which the industry is contending.

With reality-based cases as the foundation, the WICT model also includes team work and "mini-lectures" that broaden the participant's perspective of business/industry as well as provides insights for the case studies. Each team is assigned a facilitator, a senior member of the industry who acts as a consultant and teacher. Teams produce comprehensive analyses and recommendations for action.

Participant feedback had consistently revealed that the case experience was helpful because 1) it provided a context for the theories and abstract material that the participants are exposed to; 2) it provided "hands-on" experience with the concepts/techniques in a realistic cable business setting. In addition, industry leaders see that their managers become better leaders, problem solvers and competitors. The WICT case program is today considered the "best educational experience, (June Travis, CEO, National Cable Television Association, personal communication with one of the authors).

The primary benefits of the case study pedagogy for industry participants has been:

- Participants develop a context for learning.
- Participants learn to apply concepts.
- Participants learn to think about problems in an integrated framework.
- Participants learn to make trade-offs among the competing objectives of organizations.
- Participants learn to work in teams and make group decisions.

The extant evidence on the benefits of the case approach led to a recent classroom trial at Penn State University. The next section describes the results of that "experiment."

The Classroom Trial

We were interested in extending the small body of empirical research on the pedagogical effectiveness of the case method. In particular, we wanted evidence on student learning in a telecommunications management course. Further motivation for the change from a lecture/discussion model was provided by student demand for experientialb-based learning. In the belief that students are the best judges of the efficacy of the teaching methods to which they are subjected, the research plan was to have them assess their own classroom experiences.

The Treatment

The case method was introduced for the first time in an advanced undergraduate telecommunications management course (TM2). Given the focus of the course, a series of the WICT cases (described in the appendix) were selected as the main teaching material for the semester. The organization of the course was as follows: During the first few weeks, the 42 students were introduced to background material on the cable television, wireless cable (MMDS), direct broadcast (DBS), Internet service provision (ISP) and telephone businesses. The instructor gave "mini-lectures" and the students read background articles on a variety of technologies and industry trends and practices. Next, the students were introduced to "Plainview USA," a case in which a cable television operator is facing competition for the first time. The case contained broad and richly detailed information on four multi-channel (CATV, DBS and MMDS) competitors in the same market, market conditions, regulation, finance, survey research results, technology, organizational culture and behavior issues. The multiple problems presented in the case were complex therefore sound solutions required consideration of a variety of factors. The students worked individually and on teams during a six week period on a sequence of strategic business problems. They produced a series of memos and gave informal in-class presentations outlining their market analyses and strategic solutions.

The Survey & Data Collection

At the conclusion of "Plainview USA", a voluntary survey was administered to determine whether the case approach was beneficial. The survey asked students to compare their experience in a previous broadcast/cable management course (TM1) to the present one (TM2). The previous course, also a management course, was taught by lecture method. The participating students were asked to rate select aspects of both courses on a nine-point Likert-type scale and write brief narrative responses to additional items. They rated their overall satisfaction with the learning experience, the amount of learning they judged they had acquired, and the appropriateness, in their view, of the respective teaching methods. As a control, they were also asked to rate their interest in the courses' topic (not all declared telecommunications majors are interested in management). For the advanced course, TM2, they also compared the educational value of working in teams to working individually as well as the "mini-lectures" given by the teacher to elaborate on technology, industry practices, etc. The scale used ranged from "1" indicating negative evaluations (no interest in the topic, very dissatisfied with the learning experience, almost no learning occurred, the teaching method was very inappropriate) to "9" for the most positive ratings (very interested, very satisfied, learned a lot, very appropriate teaching method). Finally, they were asked to offer their opinions on what they specifically liked about each course and what would have improved each course.

Results

Thirty-one students, roughly 75 percent of the total enrollment, completed the survey. Responses to all the rated items are summarized in Table 1. In terms of interest in the topic of telecommunications management, students were generally interested in the topic as taught in both courses, that is, they gave a rating of at least six. Over 74 percent of students said they were interested in TM1 and 93 percent were interested in TM2. The means for TM1 and TM2 are 6.4 and 7.0 respectively and the difference in means is not statistically significant (see Table 2 for paired samples t-tests). It was important to establish that students regarded the two courses with similar levels of interest in order to be able to attribute other perceived differences to different teaching methods. Of course, there may be a host of other possible factors affecting the students' evaluations, such as a recency effect or differences in the two teachers for TM1 and TM2. Still, at least we can trust that there are no differences attributable to student interest in the topic.

Students were more satisfied with the learning experience in the case course than in the lecture course. In percentage terms, 94 percent were satisfied with TM2 while only 61 percent were with TM1. Further, almost 39 percent gave TM2 an eight or better while only 16 percent did so for TM1. The difference in the means, 7.1 versus 5.6, was highly significant ($p>.01$).

The students' judgment of the amount of learning they gained also indicates that they believe they learned more in TM2 than in TM1; 94 percent versus 58 percent said they learned more than an average amount. Forty-five percent rated TM2 eight or better while 19 percent did so for TM1. The difference between the means 7.4 and 5.9, was again statistically significant ($p>.01$).

Finally, in terms of the appropriateness of the case method, the mean of student responses was a significant 7.9. Students on average gave the lecture method a 5.5 for TM1; for the "mini-lectures" given early in the TM2 semester, the rating, 6.9, was also lower than the case method rating. Again, the mean differences were statistically significant. More than 93 percent of students said the case method was appropriate and no student gave it a rating of less than "4." Meanwhile, 58 percent thought the lecture method was appropriate for TM1 and more than 20 percent thought it was inappropriate.

As applied in TM2, the case method approach called for both individual work and team involvement to solve the case problems. Students appear to believe they learn more by working in teams (mean = 7.0) than by working alone (mean = 6.5). However, the difference is slight and to be statistically significant the tolerance must be relaxed to $p>.07$. Indeed, exactly the same percentage, 84, said they learned more than an average amount working both ways.

Across all the comparisons, the course in which the case method was used (TM2) was rated more positively than the lecture method course (TM1). The paired samples t-tests indicate that the differences in the mean ratings are statistically significant as well. Further, the majority of the qualitative comments that students provided indicate a preference for the case method. When students were asked, "What do you like about [TM2]?" more than half spontaneously cited the case study method. Representative responses are, "I am participating in activities that I could really be doing one day. It is also helping me decide what aspect of the business I would like to be involved in," "The case method work (sic) very well in giving the student practical experience in writing and analyzing information," "The case studies allow us to experience real situations and work and think through actual problems," "It is much more interesting that (sic) the lectures and provides students with a real world look of how companies really work."

As team work was an integral part of the course design, student feedback on this subject is worth examining. The quantitative results indicate the students may have slightly better evaluations of how much they learned working in teams. However, whether they **learned** more or not, the narrative comments imply that many of them **enjoy** team work better than working individually. In fact, seven students cited teamwork as the single thing they like best about the course. A typical comment was, "I enjoy the team aspect of the class. Business is a team, and I feel we are in the business of learning."

Discussion

It seems that students believe that they learn more telecommunication management skill by the case method, compared to traditional lecture models.

In addition, they appear to prefer a management course taught by the case method. Teamwork, a foundation of the HBS and WICT models, was also found to be beneficial. These are encouraging results. However, there are several caveats to consider. First, as mentioned earlier, the research design used here prevents us from confidently inferring case method superiority: the instrument may have promoted response bias and the number of respondents (n=31) was small. In addition, the students took TM1 either one or two semesters previously meaning that their recollections of the experience may not be accurate. Further, there may be other differences between TM1 and TM2 besides the teaching method such as teacher styles.

Another important consideration is individual student preferences. Even though the majority of these students appear to prefer the case method, there were a small minority who apparently do not like the method. One student expressed dissatisfaction with the learning experience in TM2, giving it a "3" rating. And two students rated the appropriateness of the case method "4" meaning that they felt it was somewhat inappropriate. One of these two students provided comments: "I don't like the case study method. I feel I am confused by it and don't learn much from it." Out of 31 students, the method may be suitable for the vast majority, but these two students' views must be considered: The case method is not right for every student.

Conclusion

The purpose of this paper is to provide the basic ingredients and some encouraging theory and evidence to those media management educators who are considering adopting the case method. The literature is replete with positive indications that students benefit from case method instruction in across a wide range of academic disciplines, including teacher and management education. Anecdotal evidence from the telecommunications industry supports the academic experience. The story told by the telecommunications management classroom trial suggests the method can work well in telecommunication management education as well.

Now, if the reader is motivated to pursue a plan to use cases, he or she should know that the tools are readily available. The appendix provides an annotated listing of sources of cases and a resource “catalogue” for learning how to successfully teach the method.

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Table 1

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Interest in TM1	31	2.00	9.00	6.3871	2.0278	4.112
Interest in TM2	30	3.00	9.00	6.9667	1.1885	1.413
Satisfaction with TM1	31	1.00	9.00	5.6129	2.0765	4.312
Satisfaction with TM2	31	3.00	9.00	7.1290	1.2313	1.516
Amount Learned in TM1	31	2.00	9.00	5.8710	1.7653	3.116
Amount Learned in TM2	31	4.00	9.00	7.3548	1.1120	1.237
TM1 Lecture Method Appropriate	31	2.00	9.00	5.4516	1.8044	3.256
TM2 Case Method Appropriate	31	4.00	9.00	7.9355	1.3647	1.862
Learning from TM2 "Mini-Lectures"	31	3.00	9.00	6.9355	1.5478	2.396
Working in Teams (TM2)	31	3.00	9.00	7.0000	1.4606	2.133
Working by Yourself (TM2)	31	3.00	9.00	6.5484	1.3376	1.789
Valid N (listwise)	30					

TM1 = Basic telecommunications management course taught by the lecture method.
TM2 = Advanced telecommunications management course taught by the case method

Table 1 continued
Descriptive Statistics

Interest in TM1

		Frequency	Percent	Cumulative Percent
Very Interested	9.00	2	6.5	6.5
	8.00	9	29.0	35.5
	7.00	9	29.0	64.5
	6.00	3	9.7	74.2
	5.00	2	6.5	80.6
	4.00	1	3.2	83.9
	3.00	3	9.7	93.5
	2.00	2	6.5	100.0
	Total	31	100.0	

Interest in TM2

		Frequency	Percent	Cumulative Percent
Very Interested	9.00	3	9.7	10.0
	8.00	4	12.9	23.3
	7.00	16	51.6	76.7
	6.00	5	16.1	93.3
	5.00	1	3.2	96.7
	3.00	1	3.2	100.0
	Total	30	96.8	

Table 1 continued
Descriptive Statistics

Satisfaction with TM1

		Frequency	Percent	Cumulative Percent
Very Satisfied	9.00	1	3.2	3.2
	8.00	4	12.9	16.1
	7.00	8	25.8	41.9
	6.00	6	19.4	61.3
	5.00	4	12.9	74.2
	4.00	1	3.2	77.4
	3.00	4	12.9	90.3
	2.00	2	6.5	96.8
	1.00	1	3.2	100.0
	Total	31	100.0	

Satisfaction with TM2

		Frequency	Percent	Cumulative Percent
Very Satisfied	9.00	3	9.7	9.7
	8.00	9	29.0	38.7
	7.00	12	38.7	77.4
	6.00	5	16.1	93.5
	5.00	1	3.2	96.8
	3.00	1	3.2	100.0
	Total	31	100.0	

Table 1 continued
Descriptive Statistics

Amount Learned in TM1

		Frequency	Percent	Cumulative Percent
I learned quite a lot.	9.00	1	3.2	3.2
	8.00	5	16.1	19.4
	7.00	6	19.4	38.7
	6.00	6	19.4	58.1
	5.00	9	29.0	87.1
	3.00	2	6.5	93.5
	2.00	2	6.5	100.0
	Total	31	100.0	

Amount Learned in TM2

		Frequency	Percent	Cumulative Percent
I learned quite a lot.	9.00	4	12.9	12.9
	8.00	10	32.3	45.2
	7.00	13	41.9	87.1
	6.00	2	6.5	93.5
	5.00	1	3.2	96.8
	4.00	1	3.2	100.0
	Total	31	100.0	

Table 1 continued
Descriptive Statistics

TM1 Lecture Method Appropriate

		Frequency	Percent	Cumulative Percent
Very Appropriate	9.00	1	3.2	3.2
	8.00	2	6.5	9.7
	7.00	6	19.4	29.0
	6.00	9	29.0	58.1
	5.00	4	12.9	71.0
	4.00	3	9.7	80.6
	3.00	4	12.9	93.5
	2.00	2	6.5	100.0
	Total	31	100.0	

TM2 Case Method Appropriate

		Frequency	Percent	Cumulative Percent
Very Appropriate	9.00	13	41.9	41.9
	8.00	11	35.5	77.4
	7.00	3	9.7	87.1
	6.00	2	6.5	93.5
	4.00	2	6.5	100.0
	Total	31	100.0	

Table 1 continued
Descriptive Statistics

Working in Teams (TM2)

		Frequency	Percent	Cumulative Percent
I learned quite a lot.	9.00	3	9.7	9.7
	8.00	9	29.0	38.7
	7.00	13	41.9	80.6
	6.00	1	3.2	83.9
	5.00	2	6.5	90.3
	4.00	2	6.5	96.8
	3.00	1	3.2	100.0
	Total	31	100.0	

Working by Yourself (TM2)

		Frequency	Percent	Cumulative Percent
I learned quite a lot.	9.00	1	3.2	3.2
	8.00	8	25.8	29.0
	7.00	6	19.4	48.4
	6.00	11	35.5	83.9
	5.00	3	9.7	93.5
	4.00	1	3.2	96.8
	3.00	1	3.2	100.0
	Total	31	100.0	

Table 2

Paired Samples Test

		Paired Differences							
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1	Interest in TM1 - Interest in TM2	-.4667	2.3302	.4254	-1.3368	.4034	-1.097	29	.282
Pair 2	Satisfaction with TM1 - Satisfaction with TM2	-1.5161	2.5803	.4634	-2.4626	-.5697	-3.271	30	.003
Pair 3	Amount Learned in TM1 - Amount Learned in TM2	-1.4839	2.1736	.3904	-2.2812	-.6866	-3.801	30	.001
Pair 4	TM2 Case Method Appropriate - TM1 Lecture Method Appropriate	2.4839	2.4341	.4372	1.5910	3.3767	5.682	30	.000
Pair 5	Working in Teams (TM2) - Working by Yourself (TM2)	.4516	1.3376	.2402	-4.E-02	.9423	1.880	30	.070

Appendix
Available Media Management Case Materials

For those educators considering adopting the case method, this is a brief (and by no means exhaustive) annotated listing of available cases. The objective here is merely to lead readers to a starter set of cases. Some are very complex, dealing with multiple management problems. Others are short and simple, intended as problem-solving exercises. For educators interested specifically in new technologies management cases, there is a relatively small supply, some of which were used in the classroom trial described earlier.

Harvard Business School

The well-known series of HBS cases offers a short of list of media management titles but in our opinion, they are rather dated. For example, "Cox Cable (A)" (Cespedes & Hattemer, 1986), sets up an interesting cable television direct sales management situation but since door-to-door sales is practically extinct as a marketing tool, the case appears to have little relevance to students.

Media Management: A Casebook Approach (Lacy, Sohn and Wicks, 1993; Lawrence Erlbaum)

This collection of over 40 cases became available as one of the first collections to cover a broad range of management issues in broadcasting/cable and print. These detailed and realistic cases range from in-depth to single-issue. It does not offer cases dealing with telecommunications and computer industry issue.

The Goldenson Management Case Studies (Warner, 1997)

Charles Warner has made a list of over 30 case studies available at his Web site, http://www.missouri.edu/~jourcw/cseindex.html. The cases are predominantly focused on television station management matters from sales staff development to newsroom management. They are inherently interesting to students because the very real problems presented are not too complex yet compelling enough to stimulate thinking.

The WICT Management Conference Case Collection (WICT, 1996)

The non-profit WICT organization has for several years provided the industry with its premier telecommunications management development program. The collection of cases dealing with very real and current problems, focuses on the emergence of competition and new technologies. As they were originally intended for executive training, they are very complex, highly detailed and are intended to stimulate the learning of problem solving skills across all business management functions. WICT cases can be obtained by contacting the organization at 230 West Monroe, Chicago, IL 60606 or (312) 634-2330.

Appendix
Learning to Teach by the Case Method

Regarding advice and instruction on how to teach with this method, there are scholarly articles, HBS monographs, and a number of recently published books. In addition, there is at least one training program available for college educators interested in learning how to both teach and write cases. It is offered annually through the Pace University Center for Case Studies in Education (School of Education, 861 Bedford Road, Pleasantville, NY 10570, 914-773-3879.)

A short list of reference and "how to" material:

Barnes, L., Christensen, C. R., Hansen, A. (1994). *Teaching and the Case Method: Text, Cases and Readings, 3rd ed.* Boston: Harvard Business School Press.

Colbert, J., Trimble, K., Desberg, P., eds. (1996). *The Case for Education: Contemporary Approaches for Using Case Methods.* Boston: Allyn & Bacon

Wassermann, S. (1994). *Introduction to Case Method Teaching: A Guide to the Galaxy.* New York: Teachers College Press.

Wassermann, S. (1993). *Getting Down to Cases: Learning to Teach with Case Studies.* New York: Teachers College Press.

It's a Small Publishing World After All:
Media Monopolization of the Children's Book Market

James L. McQuivey
and
Megan K. McQuivey

Syracuse University
S.I. Newhouse School of Public Communications
215 University Place
Syracuse, NY 13244
315 443-1922
jlmcquiv@mailbox.syr.edu

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It's a Small Publishing World After All: Media Monopolization of the Children's Book Market

Abstract

This study considers how the current environment of media conglomeratization is affecting the little-studied industry that provides books to millions of children each year. Two hypotheses are proposed that test different aspects of competitive market theory. Hypothesis two is supported: children's books that have ties with other media products sell more copies than books that have no such ties. The implications of the theoretical discussion and the supported hypothesis are discussed.

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It's a Small Publishing World After All: Media Monopolization of the Children's Book Market

Introduction

The question of media monopolization is not unique to the 1990s. Ben Bagdikian's now famous treatise on the topic is in its fifth edition (1997). For nearly two decades Bagdikian has documented trends towards monopolization across all the media industries. He and others have also consistently provided warnings of what might happen should the wide diversity of media outlets become dominated by only a handful of conglomerates (Gomery, 1993b; Murdock, 1982).

As critics gather evidence to counter monopoly control of the media, governments around the world are loosening regulatory controls across the board. The list of western nations that have enacted sweeping deregulatory reform of their telecommunications systems reads like a who's who of western democracy: Great Britain, Germany, France, Italy, Canada, Australia, New Zealand, and with the passage of the Telecommunications Act of 1996, the United States (Hoffmann-Riem, 1996).

The primary concern for media researchers throughout this long and evolving debate has been the monopoly control of news gathering and reporting (Hicks & Featherstone, 1978; Thrift, 1977). Because the press is regarded as the fourth estate, a necessary check against government's own system of checks and balances, the news function of the media is watched most carefully. As an example of this, perhaps the most studied medium with respect to monopolization is the newspaper. In the United States, since GE acquired NBC, Disney acquired Capital Cities/ABC, Westinghouse acquired CBS, and Time Warner acquired Turner's powerful CNN news organization, there has been serious discussion of the influence of monopolies on broadcast news as well (McQuivey & Wigand, 1997). Even within the news organizations themselves there is an awareness of the situation they face. On ABC's *Nightline* program, correspondent Cokie Roberts spoke with former Paramount pictures executive Barry Diller about this increasing trend towards monopoly control of the media, where she laughingly remarked, "I think we might look cute in mouse ears!" (ABC News, 1995).

Amid the concern over the news function of the media, other critics are equally disturbed by the potential impact of monopoly control on the entertainment function of the media. These critics are motivated by a belief that a culture is in part constructed by the narratives shared among members of a society. In modern society, the entertainment media are a major source of cultural narratives. This is the belief that originally motivated George Gerbner to pursue the cultivation effect of television (Gerbner & Gross, 1976). Other researchers attribute similar cultural significance to feature films (Gomery, 1993a).

As the complaints against television and film pile up, little attention, if any, has been paid to a mass medium often neglected in our body of research: books. When mentioned in mass media research, books generally take the role of the noble medium that once was (Postman, 1985) There are several reasons why books are still relevant today and why they should be examined in light of the modern pressure towards monopolization. First, the book publishing industry remains sufficiently large and influential. In the United States, book buying is a $20 billion a year business (*Publishers Weekly*, 1997). Second--a concern that is especially relevant to this research--the creation and publication of a book does not require the massive amounts of capital that film or video production do; therefore, the publishing industry should be capable of avoiding the economic pressure towards monopolization that is so often described as unavoidable in the film and television industries.

As a place to begin studying consolidation of the publishing industry, this research will consider the specific role of children's books. This is done for several reasons. First, children have always been a topic of concern for mass media researchers. Second, the potential impact of monopoly control over cultural narratives is greatest at the level of the young child, who is in the most impressionable stages of socialization. Third, not only are children busily learning the values of the culture, they are also shaping expectations about specific behaviors, including consumer behavior.

Thus, the purpose of this research is to examine to what extent monopoly consolidation is occurring in the children's book market.

Theory

Assumptions of a Competitive Market

Adam Smith outlined the basic ideas of free market competition in his now famous treatise, *On the Wealth of Nations*. His work, later modified and expanded by subsequent economists, has formed the basis for our entire capitalist system (Heilbroner, 1980). The primary assumption of this body of theory is that through competition, a market is compelled to efficiently produce the best goods and services at the lowest price. The ultimate beneficiary is the consumer, who is able to choose among vendors for the goods and services that satisfy his or her desires.

This theoretical world is founded on a handful of core assumptions without which true competition can not occur. Chief among them are: low switching costs for consumers who wish to choose among substitutable goods from competing firms, the availability of perfect information, and low barriers to entry and exit for firms wishing to enter or leave the marketplace (Samuelson & Marks, 1992). To understand the role these assumptions play in sustaining a competitive market, we will consider each one as it relates to the children's book market.

Low switching costs. Switching costs are costs borne by a consumer who wishes to change from one vendor to another in search of better goods or lower prices. If switching costs are high, the consumer will have a disincentive to choose another vendor, even if the other vendor provides a better good at a lower price. In the publishing industry, because retail books are generally sold in single units, there is little reason for a consumer not to consider among different publishers when buying a children's book. In fact, except for a few cases such as Harlequin or Golden Books, there is little reason for buyers to even be aware of which company published which book. Because switching costs are not present in the children's book market they have no effect on the competitiveness of this market and will not be considered further.

The availability of perfect information. The presence of perfect information in a competitive market means that consumers are able to find all the information they need to judge among competing products or services. There are two sources of information in any marketplace: public (the media or the government), or private (advertising). There are several influential sources of public information. In particular, institutional buyers (schools and libraries) rely very heavily on published reviews in sources such as *School Library Journal* (Donovan, 1991). However, according to Donovan, the most profitable segment of the children's book market is the retail segment. Here, published reviews are only influential to the extent that consumers know about them and read them. Thus, it is reasonable to assume that retail consumers are less likely to receive perfect information from public sources. In these cases, the market is very reliant on advertising to receive information about new books. This is not limited to advertising as it is commonly understood, but all of the promotional aspects of a publisher's marketing efforts, including packaging (cover design), in-store displays, product shelving deals made with retailers, and promotional offers.

This provides highly-capitalized, well-established firms with something of an advantage in this market. Those firms with the largest advertising budgets are able to provide a surplus of information about their products. They will be able to develop a more powerful image with consumers for the books they have selected to publish. In the minds of parents--mothers account for 40% of buyers of children's books (Roback, 1990)--who are eager to please today's media-aware children, the books which have the greatest combined cumulative exposure will carry more weight when a purchase decision is made. Thus, there is a pressure in the market that favors large firms, making industry consolidation a sensible economic alternative for smaller players trying to compete against larger players.

Low barriers to entry/exit. This assumption has the most significant implications for the children's book market. Entry and exit barriers refer to the costs (in labor or capital) of entering a competitive market. In short, if it costs inordinate amounts of money to enter a market, the market will tend towards low competitiveness. The film industry is an excellent example of this situation, since the costs of producing a film now average over $30 million.

One might assume that book publishing is a low-cost enterprise. Here it is important to understand the nature of economic profit. According to Samuelson and Marks (1992), while it is often assumed that a company attempts to make a profit, economists are more concerned with the company's potential for profit given the

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alternatives the firm has for investing its money. In clearer terms, this means a firm must justify that the amount of profit it earns from a given enterprise is the most efficient way to invest its resources. If book publishing returns an annual profit of 5%, that figure must be compared to the profit that could be earned from other business activities which typically return a higher annual profit. Thus, though there are profits to be earned in the children's publishing market, the firm will seek to maximize those profits in order to achieve a rate of return comparable to alternative business activities. The most direct way to maximize profits in the production of a good is to achieve a production volume high enough to benefit from economies of scale in production and distribution. If the firm is able to produce more copies of a single book, the cost per unit will tend to decrease. This raises the profit margin for the firm. However, in order to produce more books, distribution channels must be established for those books and demand for that quantity of books must be stimulated. Those two activities are where the large, highly-capitalized firm has an advantage: the latter activity is the advertising function discussed above; the former activity is where barriers to entry and exit are the strongest.

Distribution for the book market is divided into several primary channels. Our concern here is with those distribution channels which sell directly to the public. These include retail outlets which are divided into two main segments: mass-market outlets, traditional bookstores, and chain stores (Donovan, 1991). Mass-market outlets include grocery stores, drugstores and other outlets which dedicate a minimal amount of space to books, a small portion of which may be used for discounted children's titles. These titles are generally bestsellers and other books of high volume directed to a very general audience. Thus, achieving a relationship with these distributors is difficult for new entrants in the market--successful publishers with a strong backlist of titles are more likely to wield influence here.

A large tension in the current market exists between the bookstores and the chain stores. Chain stores, sometimes called "superstores," have experienced phenomenal growth in the past seven years, and analysts have predicted that these stores will hold 25% of the total bookselling market by the turn of the century *(Publishers Weekly*, 1995). These stores have been criticized for edging out smaller bookstores who don't have the resources to compete with such large inventories and retail space (Jones & Mutter, 1992). These superstores rate the success of a book by its turnover in inventory. The less time it spends on the shelves, the better. Thus, superstore retailer are less willing to pick up books from small publishers who can't demonstrate the financial capacity to promote a book to a large audience. Bestsellers perform particularly well in this environment (Milliot & Baker, 1996).

Large, influential publishers benefit from these pressures because they are more likely to have backlists with successful titles. They are also better positioned financially to attract new projects that appear promising by offering better advances. Thus, well capitalized firms who have a solid position in the market are more likely to have titles that will attract these distributors.

Another result of this kind of pressure is the trend towards cross-promotion as a means of recouping an investment in one medium by extending its play in other media. This kind of cross-promotional merchandising is very common in today's media environment, where the latest Disney movie spins off books, dolls, candies, and audio tapes, all of which can earn more at retail than the film itself does in theaters. In the book market, distributors recognize the value of these tie-ins and are eager to buy such titles because they consistently top the children's bestseller lists (Roback 1995, 1994, 1993). With this trend firmly in place, small publishers have no leverage in the market because they are not sufficiently capitalized to achieve such broad media distribution, or to acquire book rights to other media properties.

Large, conglomerate publishers are again provided an advantage. In such an environment, these pressures encourage publishers to merge with or acquire one another. This trend has been well documented in the publishing industry by such researchers as Greco (1989) and Noble (1991). The result of this activity is that smaller publishers either are pressured out of the market, or turn to larger ones for investment. Thus, consolidation becomes very likely due to the high cost of maintaining a high advertising and distribution profile in this market.

Potential Social Effects of Monopoly Control

Having established that economic pressures do tend towards consolidation in the children's book market, we should now consider why this matters. So what if the children's book market should become dominated by a few players? Our answer to that question will address three specific points: the inefficient allocation of market resources, hegemony control of ideas, and the unique role of children in a culture.

Inefficient allocation of market resources. Interestingly, the economic theory which provides the justification for the free market optimism so rampant in recent years also provide its most immediate tool for criticism. A free market is supposed to provide the most efficient allocation of resources to a society. Thus, when pressures act to inhibit a free, competitive market, resources will not be allocated efficiently. For the children's book market, this does not only refer to the paper and ink used to print the books, but to the ideas offered by authors. By definition, if there is not robust competition among publishers, there will be ideas from writers that are desired by the reading public which will not receive sufficiently wide distribution, or may not even be published at all. From within this perspective, the solution is not to artificially choose which ideas need to be supported, but to insist on market controls that increase pressure towards greater competition.

Hegemony control of ideas. Hegemony theory is a perspective advanced by critical studies theorists who analyze today's media. The general assumption behind this theory is that the mass media support the dominant culture's hegemonic position over alternative elements in the culture (Lull, 1995). This occurs because the controllers of the mass media are heavily invested in and benefit from the status quo. Thus, they have very little incentive to provide wide distribution for ideas which may threaten the dominant culture's status. A general rule of hegemony theory which applies to the children's book market is that the more capital the firm has, the more likely it is to support the dominant ideology. Hegemony provides a natural basis for later content analysis of children's books if we are able to establish that there is a tendency for monopoly control in this market. This concept is supported with research conducted by Feather and Reid (1995) who found that the market's reliance on the concept of the bestseller leads towards format homogenization and the possible restriction of smaller, alternative voices. Thus, the mainstream value system is reinforced by the mechanisms of the market.

Unique role of children. As mentioned above, the growth and social development of children has long been a topic of interest to mass media researchers concerned about the effects of the media (Comstock, 1991). The present research is not concerned with the psychological or emotional welfare of the children, but rather their socialized perceptions of their role in society. A similar concern has motivated research into the effects of advertisements targeted to children (Young, 1990).

Long (1985) has looked at the question of how conglomeratization of the publishing industry might effect our culture. She argues that we are either on the brink of revolutionary culture changes that will expand the cultural universe, or we are simply reifying the established value system. Sufficient time has passed since Long composed her analysis to argue that the revolutionary culture changes she envisioned have not occurred. Though they still might, it is our belief that the same cultural forces that were in effect in 1985 have continued to dominate.

Today's children swim in a deluge of media images perpetuated by the dominant media conglomerates. They are being socialized to understand themselves as consumers of global brands. The children's book market does nothing to alter this fundamental self-concept as long as Disney's movie tie-ins continually top the children's book bestseller lists.

Method

Hypotheses

Given the theoretical discussion above, this research will consider the following two hypotheses:

H1: The larger the children's book publisher (or ultimate parent company) is, the more retail unit sales the publisher's books will achieve.

H2: Books with tie-ins to other media will sell more units in retail than those without media tie-ins.

Hypothesis one is designed to measure the leverage that large firms have in the children's book market. Theoretically, larger publishers are able to achieve wider distribution of their books and have more funds to aggressively promote their books than do smaller publishers. Retail outlets should be attracted to these titles. This should result in increased sales relative to their competition.

The independent variable, size of publisher, is operationally defined as the gross income of the publisher's ultimate parent company from the most recent listing in *The Directory of Corporate Affiliations* or *ABI/Inform* when data was not available from the former source. This is primarily done because financial data is not available for most publishers (and definitely not for imprints) because they are wholly owned subsidiaries and therefore need not publicize financial performance data. There is a legitimate concern with the resulting operationalization, however, because it assumes that ultimate parents are all equally interested in and investing in their publishing subsidiaries. This may or may not be the case. Acknowledging this difficulty, we maintain that using ultimate parent companies is a sound starting point for this analysis. It is theoretically justifiable because of the large amount of concern over conglomeratization. If one agrees that conglomeratization is a significant force in today's media environment, then one must acknowledge the utility of using ultimate parent company income as a measure of publisher's market strength.

The dependent variable, retail unit sales of children's books, is operationally defined as the number of copies sold in retail within a given year as reported by publishers to the *Publishers Weekly* trade magazine. This is done because other data for this industry are very difficulty to obtain. Other researchers, both professional and academic, have acknowledged this point (Winter 1992). Number of copies is used to estimate market strength because that figure is readily available and is consistently measured over time by the same source. It is also theoretically justified, however, because it is in volume that publishers will achieve economies of scale.

The linkage between the independent and dependent variables is such that the higher the gross income of the parent companies in a given year, the more units a given title should be able to sell in that year. This relationship was tested with pearson's correlation coefficient.

Hypothesis two is designed to test the strength of the cross-promotional nature of the children's book market as discussed above. In other words, is the book market being used as a springboard from or to other media, further consolidating the power held by global media brands? The independent variable, tie-ins with other media, is operationalized as books with content that is derivative of broadcast television programs or feature films in release during the four-year time span of the sample (1992-1995). The dependent variable, retail units sold, is operationally defined as the number of copies sold in retail within a given year as reported by publishers to the *Publishers Weekly* trade magazine. The linkage between the two variables is such that those books with tie-ins to other media should achieve greater consumer awareness and will have more promotional funding and therefore, will sell more copies than those with no tie-ins. This relationship was tested with an independent t-test.

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Sampling

An arbitrary time-horizon was chosen that included the four most recent years of complete data reported in *Publisher's Weekly,* meaning all sales that occurred from 1992 through 1995, for a total of 476 books tracked during that time period. *Publisher's Weekly* only gathers data for the frontlist books that sell more than 75,000 copies and backlist books that sell more than 100,000 copies. Frontlist titles (published for the first time that year) and backlist titles (published previously, but still selling enough copies to merit tracking) were both included in this study because the sales of each are directly affected by the marketing clout and strength of their publishers.

For the purposes of this study, only hardcover books were included for two reasons. The practical reason is because upon examining the paperback bestseller lists, it became apparent that this list was dominated by horror books (e.g., *Goosebumps*) and books targeted to teenage girls (e.g., *Babysitter Club*). Though the lists are not specifically created to reflect a particular age group, most books on the hardback list are picture books targeted to young children, where these paperbacks are not picture books, nor are they targeted to young children. According to *Publishers Weekly,* picture books are the largest sellers in the children's book category (Roback, 1990). Based on this information, the decision was made to remove paperbacks from the list.

The four-year time horizon was chosen to allow for a wide array of titles and sales figures that might overcome the peculiarities of any particular year's performance. The span was not extended beyond that time, however, to avoid threats to internal validity from long-term industry trends. Though any possible trends are not theorized here, there is ample opportunity for a trend analysis over a larger time horizon, should future researchers wish to pursue the long-term changes in this particular market.

Results

Means and standard deviations for the sales of children's books and income of ultimate parent companies are shown in Table 1. It can be seen in this table that data for ultimate parent company income was only available for 445 of the 476 books studied. All 31 of the books not included in this figure were published by the Lyons Group, a private holding company that does not release financial information nor are industry estimates available. Because of this, its titles were not included in the testing of hypothesis one. Frequencies for media tie-ins are shown in Table 2. Note that over 40% of books from these lists are tied to some television or movie property, which is in itself a significant finding.

Hypothesis one, that larger ultimate parent companies will have more retail sales than smaller parent companies was tested by a pearson correlation coefficient, which is shown in Table 3. According to this test, the correlation was close to nonexistent, and the result was not statistically significant. Hypothesis one was not supported. This will be discussed in more detail below.

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Hypothesis two, that books with media tie-ins will perform better in retail sales than will books without media tie-ins, was tested using an independent t-test shown in Table 4. Considering that the mean sales figure for books without media tie-ins was 164,290 units compared to the mean sales figure for books with media tie-ins which was 279,856 units, it is no surprise that the t-value (-5.21) achieved significance at the .001 level. Based on these means, it is apparent that books with media tie-ins sell about 1.7 times as many copies as books without media tie-ins. This support for hypothesis two is discussed in more detail below.

Discussion

The purpose of this study was to consider how the current environment of media conglomeratization and monopolization is affecting the little-studied industry that provides books to millions of children each year. Two hypotheses were proposed that tested two aspects of competitive market theory, namely: availability of perfect information, and low barriers to entry/exit in the market. It was theorized that if these elements of a free market are not present in the children's book market, there will be inefficient allocation of market resources, a concentration and homogenization of ideas, and the reinforcement in children's minds that they are consumers of global brands.

The first hypothesis tested the idea that large parent companies could financially support a children's book publisher and thereby give the publisher an advantage in the market over smaller firms with fewer economic resources. An attempt was made to correlate ultimate parent company gross income figures with unit sales of children's books. The test resulted in no significant correlation. Hypothesis one was not supported.

To better understand what is happening in this market, the researchers went back to the data to see how ultimate parent companies measure up against one another. Table 5 was created to showcase the ultimate parent companies, sorted in descending order of influence in the market. These 23 parent companies are responsible for the great majority of children's books sold in the United States each year. Note that the largest publisher, Golden Book, has 27% of total market sales. Yet, Golden Book "only" earned $402 million in net sales in the last available fiscal year. Compare Golden Book to third-ranked Disney, which controls just over 16% of the market but earns over $18 billion a year from its total holdings. A reading from the top of the list appears at first blush to be a who's who of entertainment media. Disney is joined by News Corp., Seagrams (owner of MCA & Universal Studios), Time Warner, and National Amusement (holding company parent of Viacom and Paramount). Indeed, the top six parent companies control about 80% of the entire market. A common measure for market concentration is the Herfindahl-Hirschman Index (HHI) often used by the Justice Department when considering whether to approve mergers and acquisitions. Based on these market data, the children's book market's HHI is 1468, in the range typically considered "moderate to high concentration" (Picard, 1997). Based on this definition, the

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market is concentrated to levels that raise concern. However, hypothesis one is not able to demonstrate any consistent effect of this concentration on market performance.

There are several companies whose data obviously contributed to the lack of support for this hypothesis. Consider that Farrar, Straus & Giraux, a publisher with only one percent of the market is owned by Georg von Holtzbruck, a German holding company that earned nearly $18 billion from all its interests. Or consider Bertelsmann, a colossal media organization that earned over $13 billion from its holdings, yet has less than half a percent of the children's book market. In these cases, the strength of the ultimate parent has not translated directly into market power vis-à-vis the competition. This returns us to the concern expressed above with defining publisher strength as ultimate parent company income.

Removing these companies from consideration, however, does qualitatively enhance our understanding of firms even further down the list, such as Pfeifer-Hamilton, which recently participated in a formal request of the U.S. federal government by several companies in the industry that the government vigorously enforce antitrust law in this market, which they claim is unfairly structured to benefit companies with more economic clout (Kinsella, 1995). This is evidence that a concern expressed by Huenefeld in 1985 is still valid, when he stated that small publishers may be the hardest hit in the wave of media mergers and consolidations.

The failure to find support for hypothesis one in this research does not refute the concern that there may be monopoly (or more accurately, oligopoly) forces present in the market. Instead, it should encourage future researchers to consider operationalizing the measure of these forces differently than was done here.

Hypothesis two tested the idea that one advantage large media conglomerates bring to this market is their ability to tie their books to other significant media products, such as television series and movies. Consider the Lyons Group, the fourth largest ultimate parent in this study, controlling just over 9% of the market, whose publishing division Lyons/Barney only publishes books based on the famous purple dinosaur, Barney. With books tied to that single media enterprise, Lyons is able to sell nearly 2.5 million books a year. Another prime example is Disney, which is able to sell approximately 70% more books than Lyons with its hot media properties connected to films like *The Lion King* and *Pocahontas*. In fact, Disney is largely responsible for Golden Book's success, because Golden Book licenses Disney characters for use in its popular line of Golden Books for Children.

It comes as no surprise, then, that hypothesis two was supported. What remains to examine, however, is the social impact of this result. Does this mean that only companies who can afford to either produce expensive blockbuster films or license characters from such programs can be extremely successful in the children's book market? The authors suggest this is the case. The next question that needs to be asked is whether content is influenced in some way as a result of industry concentration and consolidation. Does this concentration restrict the marketplace of ideas, homogenizing a market that otherwise has great potential for diversity? This is one of the directions that future researchers should consider based on these results.

Though there is support for the theoretical discussion presented in this research, there are significant drawbacks to the present study. The primary drawbacks in this study are methodological in nature, many of which have been raised and discussed throughout the paper. Other concerns include the fact that this type of market data is very difficult to come by. The data for this market are only available for top sellers (roughly 150 titles each year of a total of many hundreds more). A more complete study would require the use of the entire market's data. However, this data is not available publicly, nor is it gathered by any private information source. The authors maintain that for the mass media implications of this paper, the data available were satisfactory, recognizing that they represent an elite subsample of popular books. Because we were interested in those companies which hold the most power in the market, using top sellers is a sufficient, though not optimal sample.

Another concern of the researchers is the method used to collect data for the media tie-ins variable. Recognizing that there is no systematic way to consistently code books for this kind of information, it was decided that the coding would be performed by an "expert" graduate student studying children's literature who would draw from her own knowledge of the market in order to categorize books as having a media tie-in or not. This method is less than perfect, and future researchers in this area should consider having multiple expert coders to provide more reliability, or should devise some other operationalization for this particular measure, perhaps based on notices in trade magazines or something similar.

Recognizing those methodological limitations, however, the authors assert the importance of this study as a first step towards assessing the competitive status of this little-understood, yet significant market. When considering the relative significance of this market, one should realize that in just one year the incredibly popular *Goosebumps* series of children's paperbacks (which were not included in this study) generated $112 million in retail sales (Roback, 1996). This kind of revenue would please even Hollywood executives. In total, children's books generate over $800 million a year (*Publishers Weekly*, 1996). There is little wonder, then, that large media conglomerates are eyeing this market and trying to find ways to increase their footing in it.

In a media environment dominated by a handful of giant conglomerates, the children's book market has a tendency to be overlooked, but as this study has shown, this market is also under the pressure caused by media concentration. As major media brand names like Disney seek to gain access to our children's future consumer dollars, it is apparent that the children's book market is an excellent place for them to start raising our children on their corporate milk. Considering the few conglomerate players who are powerful enough to launch such an effort, it is true that the children's publishing world is a small world after all.

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Table 1. Means and standard deviations for sales of children's books and income of ultimate parent companies.

Variable	Mean	Std. Dev.	N
Income of ultimate parent company*	5849.37	6591.37	445
Sales of children's books**	212362.00	2451615.00	476

* Income of ultimate parent company indicates most recently available net sales figure available through the *Directory of Corporate Affiliations*, or when not available, from *ABI/Inform*.

** Sales indicate unit sales of frontlist and backlist, hardcover children's books per year in any of the years from 1992-1995.

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Table 2. Frequencies for media tie-ins variable.

Variable	%
Tie-ins with other media (Broadcast TV or feature film)*	
Yes	41.60
No	58.40
	100.00
	(N=476)

- * Tie-ins with other media is coded as 1=yes if book is derivative of a feature film in release during the 1992-1995 time period or of a television show broadcast via cable or network television show during the same time period, as determined by an expert coder.

Table 3. Pearson correlation coefficients for ultimate parent income and sales of children's books.

Variables	1	2
1. Income of ultimate parent company*	-	-.002 (.973)
2. Sales of children's books**		-

* Income of ultimate parent company indicates most recently available net sales figure available through the *Directory of Corporate Affiliations*, or when not available, from *ABI/Inform*.

** Sales indicate unit sales of frontlist and backlist, hardcover children's books per year in any of the years from 1992-1995.

Table 4. Independent t-test of media tie-ins' influence on sales of children's books.

	Media Tie-ins* No Means (&SD) (N=278)	Media Tie-ins* Yes Means (&SD) (N=198)	t-value	df	sig.
Children's book sales**	164290 (96642)	279856 (352064)	-5.21	474	p<.001

* Tie-ins with other media is coded as 1=yes if book is derivative of a feature film in release during the 1992-1995 time period or of a television show broadcast via cable or network television show during the same time period, as determined by an expert coder.

** Sales indicate unit sales of frontlist and backlist hardcover children's books per year in any of the years from 1992-1995.

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Table 5. List of ultimate parent companies sorted by total unit sales over the four year period, 1992-1995.

Ultimate Parent of Publisher	Total Unit Sales (in thousands)	Percent of Total	Income of Parent (in millions of $)
Golden Book	27334.3	27.04%	402.0
Advance Publishers	17052.6	16.87%	2200.0
Disney	16387.0	16.21%	18739.0
Lyons Group	9379.8	9.28%	n/a
News Corp.	6721.2	6.65%	8641.0
Seagrams	4525.1	4.48%	6399.0
Time Warner	3292.4	3.26%	10064.0
Scholastic, Inc.	3192.7	3.16%	929.0
National Amusements	2005.0	1.98%	11689.0
Harcourt General	1977.2	1.96%	3035.0
Houghton Mifflin	1693.4	1.68%	718.0
North-South	1529.1	1.51%	1.6
Workman Publishers	1366.8	1.35%	35.0
Candlewick	1193.1	1.18%	7.5
Georg von Holtzbruck, GmbH	1034.2	1.02%	17997.0
Dorling Kindersley	736.5	0.73%	270.0
Bertelsmann	407.8	0.40%	13487.0
Platt & Munk	378.5	0.37%	0.5
Pfeifer-Hamilton	314.5	0.31%	7.5
Abbeville Press	200.0	0.20%	15.0
Hachette-Lagarder	137.0	0.14%	10954.0
Chronicle	126.2	0.12%	22.0
Hearst Corp	100.0	0.09%	95.0
Total	101084.4	100.00%	

The National Program Service:
A New Beginning?

Matt Jackson
Doctoral Student
Department of Telecommunications
Indiana University

mattj@indiana.edu

919 West 2nd Street, #15
Bloomington, IN 47403
(812) 323-8291

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The National Program Service:
A New Beginning?

Abstract

In 1992, PBS replaced the Station Program Cooperative (SPC) with the National Program Service (NPS). This paper compares programming and funding trends under both systems to determine if centralized decision-making has brought about the desired changes. The results suggest that NPS has had some impact, but that these changes are mostly due to cost-cutting measures. Corporate underwriting and station fees have not grown as hoped. Local autonomy and limited funding have prevented NPS from creating a network identity for the PBS program service.

The National Program Service:
A New Beginning?

Introduction

From its earliest inception, public television in the United States has been a decentralized endeavor. It was not until the Public Broadcasting Act of 1967 established the Corporation for Public Broadcasting (CPB) that the federal government played any significant role in public television's development. The CPB was created as a central funding source with limited authority over autonomous local stations. The CPB in turn created the Public Broadcasting Service (PBS) in 1969 to manage a distribution network and provide funding for national production (Day, 1995). In 1973, President Nixon forced the CPB to relinquish power over PBS to the local stations. Federal funding which previously had flowed from the CPB directly to PBS was instead disbursed (and dispersed) among the countless local stations. In need of a mechanism to pool their funds to purchase national programming, the stations and PBS created the Station Program Cooperative (SPC). Under this plan, each year the station managers would meet and vote on which programs should be funded by PBS.

By the late 1980s, many flaws were apparent in the operation of SPC. Most of the complaints centered around the mechanism by which decisions were made: the democratic voting system resulted in a heavy emphasis on station-produced programs at the expense of independent productions; voting inherently reduced risk-taking and innovation; controversial programs did not get funded; producers had to wait up to a year to receive funding; and clearance rates were low, resulting in a lack of national identity, reduced ratings, and reduced corporate underwriting.

In 1989, the PBS member stations voted to eliminate SPC and allow PBS to appoint a "programming czar" who would choose which programs should be funded for the National Program Service (NPS). Essentially, the PBS stations voted to replace their democratic system with centralized decision-making in hopes of addressing many of the foregoing problems.

The first broadcast season under the new system was 1992. More than five years have passed since NPS replaced SPC. The purpose of this paper is to evaluate the effects of that change on PBS programming and to see whether centralized decision-making has eliminated the problems associated with SPC. This study will compare levels of funding and types of programming for the last two years of SPC (1990-91) and three years of NPS (1992, 1994, 1996). Unfortunately, this researcher was unable to obtain consistent data for 1993 and 1995 to include in this analysis.

The results of this study suggest that NPS has had some impact on the types of programs produced, but that these changes are mostly due to cost-cutting measures. Rather than taking greater programming risks, NPS has continued to focus on low-cost programs to produce more total hours of programming with the same amount of money. Corporate underwriting and station fees have not grown as hoped. Moreover, the limited funding of NPS and the diverse needs of 351 stations have prevented NPS from creating a network identity for the PBS program service.

The Rise and Fall of the Station Program Cooperative

On May 23, 1953, KUHT, licensed to the University of Houston, became the first educational television station to go on the air. Within two years, fifteen more noncommercial stations were operating across the nation. Even before KUHT began transmitting, a chief concern was programming. The high cost of television production meant that stations could not sustain service to their communities without a source of national programming. The Ford Foundation, through its Fund for Adult Education (FAE), created the Educational Television and Radio Center (later known as NET) to supply programs to public television stations. Originally conceived of as a distribution center, NET quickly began to coordinate production as well (Blakely, 1979).

As more stations came on the air, regional networks developed as well, and by 1968, there were six regional networks distributing instructional programming. The National Instructional Television Center in Bloomington, Indiana became a national library for instructional programming. All of these production centers were competing with NET for the limited supply of stations' funds. Many of the existing stations were funded by states or universities to serve educational needs, and as Rowland (1993) points out, "State funding has always been predicated on the educational and instructional potential of public broadcasting" (p. 179). A tension developed between these small stations which wanted instructional programming, and NET and the large community stations, which wanted to produce general audience programming (Blakely, 1979).

In 1967, the Congress passed the Public Broadcasting Act (Pub. L. No. 90-129) to enact the recommendations of the Carnegie Commission, which had issued its report earlier that year. The law created the Corporation for Public Broadcasting (CPB) to oversee a new, federally supported public television system. The CPB was not allowed to create its own programming, so it established the Public Broadcasting Service (PBS) to oversee production and coordinate the interconnection of the existing stations. Much of the production money was directed toward NET and a few large community stations such as WGBH in Boston and WETA in Washington, DC which quickly became the major program suppliers for the system (Day, 1995).

Soon after the creation of CPB, President Nixon took office. Nixon did not like what he perceived as the anti-administration programming being produced by NET (Blakely, 1979). So in 1972, he vetoed funding for CPB and forced a reorganization of the system. More funding was to be passed through CPB directly to the local stations in the form of Community Service Grants (CSG). PBS was turned into a membership organization controlled by the local stations.

This structural change had a profound effect on public television. Lashley (1992) writes, "PBS was changed from a highly centralized 'fourth network' managed by national officials to a highly fragmented and decentralized membership organization comprised of public television stations. Station managers were expected to exercise discretion that was more responsive to the tastes of local audiences than national public broadcasting officials" (p. 88). Nixon had correctly predicted that shifting decision-making authority from national officials to local station managers would result in more conservative programming and fewer political programs.

Much of the money and decision-making authority was now in the hands of the station managers. But there was nowhere near enough money for stations to begin producing their own programs. They still had to rely on national programming to attract viewers and fill out their schedules. So in 1973 the PBS member stations voted to form the Station Program Cooperative (SPC). All 152 stations would participate in a series of voting rounds to choose which programs to fund and they would pool their resources along with funds from CPB and the Ford Foundation (Katzman, 1975b). The hope was that SPC would provide a "cost-effective method for purchasing and distributing programming that satisfied the unique tastes of each public television station and its public" (Lashley, 1992, p. 89).

Stations continued to use SPC from 1974 to 1990. During this time, there were many complaints. Local stations, dependent on state dollars, underwriting, and viewer donations, took few programming risks. Richard Moore (1975) points out that,

> The financial condition of each station becomes the determining factor in what passes for program planning and decision making in public broadcasting....Public broadcasting will continue to be dominated by political rather than programming interests so long as the 'integrity' of public broadcasting is identified with a system in which the collectivity of the bureaucracies, as represented by the sum of the licensees, has the controlling voice in national programming policy (p. 21).

Day (1995) echoes this sentiment: "Strong leadership can articulate a clear, precise purpose; a committee produces rhetorical mush....To avoid a monolith, [the system] created a bureaucratic monster--inefficient, uneconomic, and unwieldy--and pronounced it good because above all else, it was demonstrably 'democratic'" (pp. 5-6).

After studying SPC in its first year of operation, Katzman (1975b) found that stations were extremely conservative; choosing previously successful programs and the cheapest offerings, while rejecting innovative or ambitious projects. This had a secondary effect of discouraging underwriters from supporting the development of new programs since they might not air nationwide. Katzman felt the structure of SPC precluded risk-taking:

> It is difficult to imagine a scenario in which this type of voting procedure can support innovative programming. In fact, it is difficult to imagine how this type of voting procedure can do much more than sort through old programs to determine which stations want which. It is a case of the sum of the parts adding up to less than the whole. A single decision-making entity, or a deliberate body meeting face-to-face, might ponder questions of balance, diversity, innovation and quality; but the accumulated decisions of 150 entities creates a statistical force toward the known, the safe, the cheap (1975b, p. 45).

Why, given all the criticism of SPC, did it last for 17 years? The answer lies in the decentralized nature of public television. Once stations obtained power over programming (and the funds to procure programming), they were loathe to give it up. After Nixon had demonstrated the ability of politicians to coerce the CPB, stations saw

SPC as a "heat shield" which would insulate programming decisions from political pressure (Hoynes, 1994).

Moore (1975) writes that the SPC represented the very essence of the system, stating that public television is:

> based on the principles of decentralization and a collective expression of choice regarding national program scheduling. The perfect expression of these principles is the Station Program Cooperative....The one heresy that public television cannot tolerate is the emergence of a strong individual or group with the resources to generate imaginative and popular programming free of the extraordinarily dense filtering system represented by the sum of the stations (p. 20).

Similarly, Day (1995) notes that local stations "oppose the emergence of strong national leadership. Their motives are akin to the feudal barons of earlier times who made certain that a weak and compliant king sat on the throne in England" (p. 6).

It should come as no surprise that stations wanted to retain as much power as possible. In her study of public television, Lashley (1992) points out that, "In all organizations, goal attainment--surviving and accomplishing the stated objectives or mission--has primacy. Although the public organization is certainly no exception to this rule, what is exceptional is that all too often managers of the public organization must trade off the attainment of stated goals in favor of survival goals" (p. 1).

Eventually, the stations had to admit that SPC was inefficient and inflexible. In the rapidly expanding media environment of cable and VCRs, public television could not afford to keep a system where programming decisions took up to a year to make. In the last four years of SPC, PBS lost 12 percent of its audience (Klinghoffer, 1991). In 1990, the PBS member stations voted to disband SPC and allow one person at PBS--the Executive Vice-President of Programming and Promotion--to choose most of the programming that would make up the National Program Service (NPS). Jennifer Lawson was the first programming executive and 1992 was the first year under the new system.

SPC or NPS: A rose by any other name...

Comparing individual programs produced under SPC or NPS would be a difficult, subjective task. Instead, this study looks at objective measures such as levels of funding and types of programs produced. No claim is made as to whether the quality of individual programs has improved or declined. But objective measures can reveal certain trends under the old and new system.

Funding

Funding data is available for fiscal years 1990-92, 1994 and 1996 (Tables 1 & 2). The total budget grew 3 percent from 1990 to 1991 and 13 percent from 1991 to 1992 (the first year of NPS). Between 1992 and 1994, the budget fell 11 percent, but then increased 9 percent between 1994 and 1996. The 1996 budget is 10 percent greater than the last year under SPC (1991), but remains below its peak level in 1992.

Station contributions grew 14 percent between 1990 and 1991 and 8 percent the following year. Between 1992 and 1994 station contributions declined more than 18 percent but have since grown by 5 percent. However, station contributions remain 7 percent below their level in 1991, the last year of SPC. Corporate underwriting grew 8 percent from 1990 to 1991 and then jumped almost 24 percent in 1992, almost matching the contributions from stations. Underwriting fell 20 percent between 1992 and 1994 and fell an additional 12 percent between 1994 and 1996. Overall, corporate contributions in 1996 were at their lowest level in seven years, 30 percent below their peak in 1992.

CPB funding dropped more than 40 percent from 1991 to 1992, but has increased 37 percent since then. CPB funding still remains 20 percent lower than during 1991, the last year of SPC. A combination of foundation and federal grants as well as other sources fell 13 percent between 1990 and 1991. These other sources grew by 41 percent between 1991 and 1992 and have grown an additional 26 percent since 1992. These sources represented the biggest contribution to the NPS in 1994 and 1996.

Programming

The total hours of programming produced has been increasing at a slow but steady rate, from 1500 hours in 1990 to 1645 hours in 1994 (See Tables 3 & 4). PBS codes programming into one of seven categories: children's, cultural, public affairs, science/nature, educational, how-to, and sports.

Public affairs programming grew 22 percent under the SPC between 1990 and 1991. It grew an additional 6 percent during the first year of NPS in 1992. Public affairs programming grew 15 percent between 1992 and 1994, and 16 percent between 1994 and 1996. Cultural programming declined 23 percent during the first year of NPS (1992) and dropped an additional 12 percent by 1994. However, between 1994 and 1996, cultural programming increased by 31 percent, though it still remains below its level during the last two years of SPC.

Children's programming, which declined by 14 percent in the last year of SPC (1991), grew by almost 65 percent in the first year of NPS (1992). Between 1992 and 1994, this category grew just 4 percent, but then increased by 35 percent between 1994 and 1996. Science/nature shows, which had increased by 25 percent from 1990 to 1991, have steadily declined since the start of NPS. Science/nature programs were cut by 14 percent in 1992 and reduced an additional 23 percent by 1994. From 1991 to 1994, science/nature programming fell by 44 percent.

How-to programs dropped by ten percent in the last year of SPC and fell an additional 13 percent during the first year of NPS (1992). Since 1994, how-to programming has increased 25 percent, bringing it back to its 1990 level under SPC. Educational programs (generally tele-courses) have fluctuated considerably in this study, declining more than 50 percent between 1990 and 1991 and then increasing 72 percent the following year. Education programming fell 21 percent between 1992 and 1994 and then dropped to just two hours of programming in 1996. Sports has consistently remained at less than 1 percent of all programming. Sports programming has always been low. Under SPC, two hours of sports were produced annually. Since the advent of NPS, this has increased to eight hours, but it still represents less than one percent of all programming.

Programming sources

One criticism of SPC was that it favored station-produced programs to the detriment of independent productions. The large producing stations such as WGBH, WNET, and the state networks had a vested interest in making sure their productions were funded, since much of the money went to station overhead. Back room deals were often made whereby these stations would agree to vote for each other's proposals (Virginia Fox, personal communication, April 12, 1996). The problem became so bad that independent producers lobbied Congress for direct funding. In 1988, Congress directed CPB to fund independent productions through the Independent Television Service (ITVS). The first shows produced by ITVS were made available in 1992, but many stations did not carry them (Day, 1995).

Unfortunately, this researcher was unable to obtain detailed information on programming sources, since station productions were counted twice (as station productions and as co-productions with independent producers). However, part of the story can be pieced together. Stations have consistently produced between 54 and 61 percent of the programs throughout the 1990s (Table 5). From 1991 to 1994, independent productions and co-productions with stations rose from 58 percent of all programs (908 hours) to 71 percent (1167 hours), a 28 percent increase. Between 1994 and 1996, independent productions rose an additional 4 percent.

Analysis

One objective of switching to NPS was to increase corporate underwriting by adding more certainty to the program selection process. Underwriting generally grew (and fell) at twice the rate of the total budget during both SPC and NPS through 1994. However, between 1994 and 1996, underwriting fell 12 percent while the overall budget grew 9 percent. Since the first year of the NPS in 1992, corporate underwriting has fallen more than 30 percent. It is likely that a variety of factors has contributed to this trend. It is well established that corporations like to be associated with "feel-good" programs that will improve their corporate image as opposed to controversial political programs (Barnouw, 1978). The reduction in science/nature programming under NPS may have eliminated some of the more attractive underwriting opportunities, leaving less desirable public affairs programming as the alternative. A second factor is the fragmented nature of public television. With more than 350 stations scheduling programs independently, it is difficult for PBS to engage in effective nationwide promotion. This, in turn, discourages corporate sponsorship.

Between 1992 (the first year of NPS) and 1994, total funding of NPS fell by $34 million (11 percent) and station funding fell by $17.7 million (19 percent). One explanation for this decline in station support of NPS would be if total revenues for public television had fallen. However, total public television income remained constant at about $1.4 billion between 1992 and 1994.

A second explanation could be that stations are choosing not to use NPS. In 1991, the last year of SPC, only 59 percent of the stations participated fully in purchasing SPC programs. The following year, 82 percent of the stations participated in NPS. If this percentage subsequently declined, it would suggest either dissatisfaction with NPS or more attractive alternatives. Unfortunately, similar data is not available for 1994 and 1996 to see if stations became dissatisfied with NPS and dropped out.

A third potential explanation for decreased funding by stations is improved efficiency. If the demand for NPS programming is near its ceiling and NPS produced programs more efficiently, stations might reduce funding rather than produce unwanted programs they cannot use. If this is true, the average cost per hour to produce programs should have declined. (Of course, stations could maintain funding and improve the quality of the productions instead.)

Since NPS replaced SPC in 1992, total hours have increased by 24 percent (372 hours), while the budget has only increased 10 percent during the same period. In fact, between 1992 and 1994, total programming hours increased by 2.5 percent even though the budget *declined* by 11 percent. In 1990 and 1991, programming cost about $170,000 per hour to produce (Table 6). In 1992, the first year of NPS, costs increased by 10 percent to $187,000 per hour. By 1996, costs had dropped $37,000 (20 percent) to $150,000 per hour. This figure is lower than the 1990 costs in current dollars (without taking into account reduced purchasing power due to inflation). This data suggests that NPS has become more efficient than SPC.

Has NPS truly become more efficient or has it chosen to fund programs that are inherently cheaper to make? Two program categories that declined significantly during NPS were cultural programs and science/nature programs. Those are also the two most expensive types of programs to produce. In 1992, the last year for which data is available, science/nature programs cost three times as much to produce as public affairs programs ($372,000 per hour vs. $127,000 per hour) (Table 7). Cultural programs cost $283,000 per hour, more than twice as much as public affairs.

Between 1991 and 1994, science/nature programs were cut by 45 hours (44 percent) and cultural programs were cut by 134 hours (32 percent) while public affairs programs grew by 150 hours (22 percent). Switching to public affairs programming saved NPS more than $35 million ($21,000 per hour). Children's programming was the only program category to grow during this time period that cost more than average to produce. Between 1994 and 1996, cultural programming began to grow again while public affairs kept pace with overall growth, remaining 50 percent of all hours. Science/nature programming remained flat, dropping from 5.3 percent of all programs to just 4.6 percent, which is 45 percent below its share during the last year of SPC (1991).

Conclusion

In the five years since the National Program Service replaced the Station Program Cooperative, PBS has been able to produce more programming for less money. However, this appears to be the result of reliance on cheaper types of programs as much as increased efficiencies associated with centralized decision-making. By reducing expensive cultural and science programming and increasing public affairs programming, NPS cut its cost per hour by more than 10 percent between 1991 and 1994. It is important to note that part of this programming trend began before NPS replaced SPC. Public affairs programming was already rising and cultural programming was already declining. Switching to NPS may have simply accelerated the process. However, NPS reversed SPC trends in children's and science/nature programming.

It was hoped that a "programming czar" would give PBS a network identity which could be leveraged into increased underwriting revenues. Instead, NPS underwriting fell by almost $18 million (30 percent) between 1992 and 1994, even though total business contributions to public television only fell $7.5 million (3 percent). It should be noted that underwriting revenues were just as volatile under SPC, so this does not necessarily indicate that businesses are less happy with NPS.

The biggest problem with securing underwriting is the lack of a coherent national schedule--a problem NPS did not address. A network schedule requires common clearance of programs. Businesses to not want to underwrite programs unless they will air at the same time nationwide. This has always been a problem for PBS. Lack of a common schedule also reduces the potential audience by making promotion more difficult.

The real barrier to a national schedule is that each station tries to customize its schedule to its market. Local subscriber donations are the largest single source of funds for public television. Stations adjust their schedule in order to maximize ratings, which in turn increases local viewer donations and business underwriting. As one station manager told this researcher, if PBS offered programs to stations for free like the commercial networks, building a national schedule would be easy. As it is, PBS charges stations for the programs and then tries to tell the stations when to air them (Roger Rhodes, personal communication, April 11, 1996).

NPS has had some beneficial effects. In its first year it canceled eight long-running series that probably would have been continued for years under the slow-to-change SPC system. As Day (1995) points out, NPS allows for more programming contingencies: "The public system's ability to perform more like a real-time network and less like a preprogrammed movie channel must be accounted one of the major gains from centralizing programming under a single executive" (p. 309). In addition, during SPC, children's programming was not much of a priority. Today it is the cornerstone of the PBS identity. Jennifer Lawson, the first programming executive, was able to make some bold programming decisions, such as funding "Where in the world is Carmen Sandiego?" It is highly unlikely that a children's game show would have been funded by the station managers under SPC.

Lawson resigned from her post in February, 1995 after some of her decision-making authority was taken away. Her position remained unfilled until June, 1996 when Kathy Quattrone was chosen as Lawson's replacement. Quattrone has stated that her goal is to expand programming dealing with history, science, and American drama.

The inherent problems of public television lie not with NPS but with the system's inadequate funding and balkanized structure. CPB, PBS, and all 351 stations combined operate on $1.4 billion per year. In comparison, ABC, NBC, and CBS have revenues of $3 billion *each*. The average prime time network program cost $1 million per hour; more than *six times* the average cost of NPS programming. NPS would only be able to produce 267 hours of prime time network programming at that rate.

The bigger problem, however, lies in public television's tortured structure. Referring to the current system (which includes NPS), Day (1995) writes: "The concept of public-service television, and thus the justification for it, is blurred in a babel of diverse aims. Worse, when national programming, and particularly programs involving risk, must run the gauntlet of more than three hundred local outlets, each with its own self-defined purpose, only the bland will succeed" (p. 5). While NPS allows for centralized planning of program production, each station still chooses which programs it will run and when they will air.

There is no easy solution to public television's dilemma. One option would be to create a truly national network, where the programming is offered to affiliates for free. This would mean returning to the system where money goes directly to PBS, rather than passing through the stations first. This would limit both the stations' ability to purchase outside programming and limit PBS' ability to raise money through viewer donations.

Another alternative would be a PBS cable channel (or Internet channel) that bypasses the local stations completely. Aside from cutting off the 30 percent of the population that does not have cable, this option would also cripple local PBS stations, which depend on PBS for their survival. One could argue these stations serve little more than a fundraising purpose already. Less than five percent of all programming on public television stations is locally produced.

The best solution, and one which has no chance in this era of cost-cutting, would be a dramatic increase in funding so that PBS could operate as a network without relying on station contributions while at the same time keeping the current funding of local stations intact. The network identity of PBS would grow, leading to an increase in corporate underwriting. Stations would be able to keep all of their viewer donations, creating a fund for increased local programming. Until such time, the switch from the Station Program Cooperative to the National Program Service is a step in the right direction.

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Table 1. Funding for SPC (1990-91) and NPS (1992-96) in millions of dollars.

	1990 (SPC)	1991 (SPC)	1992	1994	1996
Stations	77.2	88.2	95.4	77.7	82.1
Corporate	69.8	75.9	93.9	75.4	66
CPB	37.9	38.6	22.6	26.3	31
Other*	72.2	62.9	89	87.5	112.4
Total	257.1	265.6	300.9	266.9	291.6

*Other includes grants from foundations, federal agencies and other sources.

Table 2. Percentage of total funding for SPC and NPS by source.

	1990 (SPC)	1991 (SPC)	1992	1994	1996
Stations	30	33.2	31.7	29.1	28.1
Corporate	27.1	28.6	31.2	28.3	22.7
CPB	14.7	14.5	7.5	9.9	10.6
Other*	28.1	23.7	29.5	32.8	38.5
Total	100	100	100	100	100

*Other includes grants from foundations, federal agencies and other sources.
**May not add to 100% due to rounding.

Table 3. Programming hours by genre for SPC (1990-91) and NPS (1992-96).

	1990	1991	1992	1994	1996
Public Affairs	560	686	726	836	974
Cultural	428	422	327	288	379
Kids	177	152	250	260	352
How-to	146	131	114	113	141
Science/Nature	106	132	113	87	89
Education	81	39	67	53	2
Sports	2	2	8	8	2
Total hours	1500	1564	1605	1645	1936

Table 4. Percentage of total hours by genre for SPC (1990-91) and NPS (1992-96).

	1990	1991	1992	1994	1996
Public Affairs	37.3	43.9	45.2	50.8	50.3
Cultural	28.5	27	20.4	17.5	19.6
Kids	11.8	9.7	15.6	15.8	18.2
How-to	9.7	8.4	7.1	6.9	7.3
Science/Nature	7.1	8.4	7.0	5.3	4.6
Education	5.4	2.5	4.2	3.2	0.1
Sports	0.1	0.1	0.5	0.5	0.1
Total hours*	100	100	100	100	100

*May not add to 100% due to rounding.
Source for all tables: Peter Downey, PBS and the PBS web site: http://www.pbs.org/insidepbs/facts/npsfunding.html

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Table 5. Program sources for SPC (1990-91) and NPS (1992-96).

	1990		1991		1992		1994		1996	
Source	Hours*	% of total	Hours*	% of total	Hours*	% of total	Hours*	% of total	Hours*	% of total
Stations	820	54.7	878	56.2	873	54.4	930	56.5	1177	60.8
Independent	937	62.5	908	58.1	1085	67.6	1167	70.9	1216	62.8

* Hours includes co-productions with other sources.
Source: Peter Downey, PBS

Table 6 Programming costs per year.

	Average program cost per hour
FY 1990	$171,400
FY 1991	$169,820
FY 1992	$187,477
FY 1994	$169,249
FY 1996	$150,620

Source: Peter Downey, PBS.

Table 7 Cost per program (1992).

Program Category	Cost per hour
Children's	229,600
Cultural	282,874
Public Affairs	126,859
Science/Nature	373,451
Educational	105,970
How-to	78,070
Sports	95,426
Average cost	$187,477

Source: Peter Downey, PBS.

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State Influence on Public Television:
A Case Study of Indiana and Kentucky

by Matt Jackson
Doctoral Student
Department of Telecommunications
Indiana University

mattj@indiana.edu

919 West 2nd Street, #15
Bloomington, IN 47403
(812) 323-8291

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State Influence on Public Television:
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Abstract

This study compares public television stations in Indiana and Kentucky to explore how different levels of state involvement affect public television. The results suggest that each station adjusts its mission according to its major source of funding. The Indiana stations, dependent on viewer donations, rely heavily on PBS programs. Kentucky Educational Television (KET), supported by the Kentucky legislature, focuses on classroom programming. Taxpayers in Kentucky receive a wide array of classroom programming in addition to their public television service. However, television viewers will find few differences in the program schedules of stations in Indiana and Kentucky. Although state involvement affects their priorities, all stations rely on national programming because of the economics of program production.

State Influence on Public Television:
A Case Study of Indiana and Kentucky

Public television is under siege. Critics on the right claim it is obsolete. Critics on the left claim it is bureaucratic. Even supporters within the system are growing exasperated. "Its human and economic resources are thinly spread over a highly fragmented system, its national leadership is divided and largely impotent, its creative energies are sapped by the inevitable competition and infighting, and its sense of purpose is clouded by parochialism and suspicion" (Day, 1995, p. 4). In the last few years, there has a renewed focus on what should be the appropriate level of federal support.

For all the emphasis on federal funding, state governments also have played an important role in shaping public television. As Kathleen Weber (1984) points out, "The largest single source of financial help for public broadcasting throughout its history--the states--has often gone unheralded and unnoticed" (p. xxv) (emphasis in original). Even though state governments continue to contribute as much money as the federal government, few scholars have examined the role of states in shaping the policies and strategies of public television stations.

This study compares public television stations in Indiana and Kentucky, two states with dramatically different levels of state involvement, to explore how such involvement affects public television. Indiana and Kentucky have vastly different public television networks. Indiana has eight stations licensed to either community boards or universities. The state does not hold any licenses. Kentucky has a network licensed to the state with a central broadcasting facility and 15 transmitters scattered statewide. In addition, Kentucky has one community station and one university station.

Both quantitative and qualitative methods were utilized in this research. Four Indiana stations, an independent Kentucky station, and Kentucky Educational Television (KET) were compared on such measures as sources of revenues and programming outlays. In addition, the general managers of all five stations and the executive director of KET were interviewed to gain their perspectives on state involvement in public television.

One must acknowledge from the outset that every public television station responds to a unique set of circumstances. Stations are licensed by the FCC to serve particular communities, and the geographic and demographic characteristics of those communities have a profound effect on a station's policies, regardless of state involvement. This paper does not argue that state funding is determinative of a station's policies, but rather that it is one more factor which exerts a subtle influence on the station's identity. As Day (1995) points out, "Not surprisingly, the missions of individual stations were strongly marked by such local factors as the nature and needs of the licensee institution, the primary source of the station's financial support, or, in the case of the free-standing community stations, by the need to attract viewers and viewer support" (p. 28).

The results of this study suggest that each station adjusts its mission in order to stabilize its major source of funding. As Lashley (1992) succinctly frames the problem, "In all organizations, goal attainment--surviving and accomplishing the stated objectives or mission--has primacy. Although the public organization is certainly no exception to this rule, what is exceptional is that all too often managers of the public organization must trade off the attainment of stated goals in favor of survival goals" (p. 1). This is one reason why none of the stations in this study provide a significant amount of local programming, even though serving the local audience is a primary goal of the public television system. Thus, the Indiana stations, which are primarily dependent on viewer donations, rely heavily on locally popular programs supplied by PBS. KET, which is heavily supported by the Kentucky legislature, focuses on the production of educational programming for classroom use. Less than 25 percent of the programs produced by KET are broadcast to the general public. Although state involvement does impact station priorities, the economics of program production causes all public stations to focus heavily on national programming in constructing their program schedules.

The first section of this paper will outline the history of public television in the United States. The second section will discuss the role of the states in that history. The third section will describe the current structure of public television and the general role that the states play today. The paper will then analyze the structure and programming of public television stations in Indiana and Kentucky. This data includes interviews with the general managers of four Indiana stations, one Kentucky station, and the executive director of Kentucky's state network. The results will be discussed in terms of how differences in state involvement affect stations in each state. These differences are not always revealed in a station's program schedule. Though the state of Kentucky is significantly more involved than Indiana, the general public will perceive few differences in the programming offered in each state. This is because KET, in order to secure state funding, has focused primarily on instructional programming for schools, leaving its public stations to run the same PBS programming found elsewhere.

A Brief History of Public Television

The history of public television begins with radio when universities held some of the earliest experimental radio licenses. A few of these stations, notably WHA at the University of Wisconsin, saw radio's potential as an educational medium, and in 1925, the Association of College and University Broadcasting Stations (ACUBS) was formed. At their first convention in 1930, the members of ACUBS sent a telegram to the conference of state governors urging the governors to lobby for reserved channels for states and universities (Blakely, 1979). This was an early attempt at involving state government in noncommercial broadcasting.

In 1934, ACUBS changed its name to the National Association of Educational Broadcasters (NAEB). In 1950, with funding from the Ford Foundation's Fund for Adult Education, the NAEB and other educational organizations formed the Joint Committee on Educational Television (JCET). The purpose of JCET was to lobby the FCC to reserve some television channels for educational stations. At first, the FCC was loathe to set aside any television channels because few of the radio frequencies that had been reserved for educational use were being used. Fortunately for JCET, Frieda Hennock, the first woman to serve on the FCC, lobbied strenuously on their behalf

(Day, 1995). Eventually, the FCC set aside 80 VHF channels and 162 UHF channels for noncommercial licensees.

Many of the colleges and universities involved in the NAEB were land-grant institutions funded by state government. Indirectly, state governments played a large role in public television's early history by providing grants to help build stations at universities. These grants were matched by the Ford Foundation through its Fund for Adult Education (FAE), which, for many years, was public television's most important benefactor. Between 1952 and 1966, the Ford Foundation put more than 100 million dollars into educational television (Gibson, 1977).

In 1953, KUHT, licensed to the University of Houston, became the first educational television station to go on the air. Programming was a key concern from the beginning. Television production was very expensive compared to radio and economies of scale demanded that programs be distributed among the stations. The Ford Foundation established the Educational Television and Radio Center (later National Educational Television or NET), a major program supplier through the early 1970s (Day, 1995).

As more noncommercial stations became operational, regional networks were formed. These networks focused primarily on instructional television (ITV) for schools, while NET focused on "educational" television (ETV) aimed at a general audience. Thus, the regional networks competed with NET for production funds.

The Carnegie Commission's 1965 report, Public Television: A Program For Action, suggested a radical restructuring of educational television with the federal government as the primary funding source (Day, 1995). The report distinguished between three types of television: commercial, instructional and public. Public television was defined as, "all that is of human interest and importance which is not at the moment appropriate or available for support by advertising, and which is not arranged for formal instruction" (Carnegie Commission, 1967, p. 1). The Carnegie Commission recommended keeping power at the local level:

> Committed to diversity and to the differentiated audience, Public Television is deeply reliant upon the vigor of its local stations. Admittedly, like commercial television, it must have central sources of programming. But unlike commercial television, it will depend also upon a strong component of local and regional programming, and it must provide the opportunity and the means for local choice to be exercised upon the programs made available from central programming sources.... The local stations must be the bedrock upon which Public Television is erected, and the instruments to which all its activities are referred (pp. 33, 36).

However, the Commission understood that the economics of broadcasting required that a central source of programming be available to the local stations and so recommended that the federal government establish a non-profit, private corporation to oversee the interconnection of stations and assist in the production of programming.

The passage of the Public Broadcasting Act in 1967 shifted much of the focus away from instructional programming and toward more general programming. The federal government provided funding to the CPB, which created the Public Broadcasting Service (PBS) to coordinate production and distribution. NET and a few large community stations such as WGBH in Boston became the system's major program suppliers (Day, 1995).

The Role of the States

As mentioned previously, educators tried to involve state government in broadcasting as early as 1930 by asking governors to lobby for radio frequencies. Wisconsin established the first state radio network in 1945. States became involved in public television as a way to bolster education, which was primarily a state responsibility. State funding supported public television in two ways. First, state departments of education and state universities provided much of the funding needed to build television facilities. Second, the high cost of programming and its relative scarcity necessitated the development of interconnection networks. While many of these networks were regional, some states established their own networks as well (Blakely, 1979).

Alabama established the first state network in 1955. By 1963, state agencies were operating networks in Oklahoma, Arizona, South Carolina, Oregon, and Puerto Rico. State departments of education were also members of regional networks such as the Eastern Educational Television Network (EEN) which connected stations in New England and the mid-Atlantic states. In 1958, 16 southern states established a network to provide instructional programming for various school levels (Blakely, 1979).

Since education was one of their primary responsibilities, state legislatures were chiefly concerned with instructional programming, rather than programming for general audiences. Day (1995) writes that, "some state legislatures were beginning to see in the new medium a partial solution to the problem of spreading the state's educational resources among more of its citizens" (p. 39). Even stations that were not a part of state networks understood that instructional television (ITV) was a part of their mission. Indeed, distribution centers like the National Instructional Television Center in Bloomington, Indiana helped make instructional programs more readily available than other types of programs (Blakely, 1979).

A tension existed between the large community stations like WGBH, which sought to produce programming for general audiences, and many of the smaller state and university funded stations who wanted instructional programs for use in the classroom. As Rowland (1993) notes, "State funding has always been predicated on the educational and instructional potential of public broadcasting" (p. 179). Thus, state involvement in public television has often led to a reallocation of scarce resources.

The Current Structure of Public Television

Currently, 203 licensees operate 351 public television transmitters in the United States. There are four basic types of licensees: community stations, university stations, state-run stations, and local school board-run stations. Almost half are independent community stations. Universities hold about 1/3 of the licenses, and state and local governments operate the rest. According to the Organization of State Broadcasting Executives (OSBE), 18 states held station licenses in 1996. An additional seven states give direct support to university stations that are mandated by statute and are part of a statewide network.

Most public television stations are affiliates of the Public Broadcasting Service (PBS), a membership organization that coordinates the production and distribution of programming. While PBS resembles a network, local stations have much more leeway than commercial network affiliates in choosing which programs to broadcast and at what time. This is because public television is a decentralized system where the stations retain most of the decision-making authority.

The total income for public television (including indirect and in-kind support) in FY 1994 was $1.4 billion (CPB, 1995). As a comparison, three major commercial networks (ABC, NBC, & CBS) generated revenues of $3 billion *each* in 1994--and this does not include the income generated by their affiliates. CPB received $275 million dollars from the federal government in FY 1994. Half of CPB's allocation goes directly to local stations in the form of Community Service Grants (CSGs). In FY 1994, this added up to $140 million. Overall, local stations get an average of 18 percent of their income from the federal government (CPB, 1995).

State funding varies widely, depending on whether the station is licensed to a community, university, state, or a local government. Funding also varies according to the size of the station. For example, in 1992, the 15 community stations with at least a 10 million dollar budget received an average of one million dollars in state funding, which was about three percent of their budget. The seven state networks with a budget over 10 million dollars received an average of 11 million dollars, or 56 percent of their funds from the state (see Table 1).

Table 1. Average level of state funding and percentage of budget by size and type of station.

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
$10 million +	$1,100,000 3% of budget	280,000 1.8%	11,000,000 56%	----
$6-10 million	1,500,000 19%	862,000 10%	4,630,000 51%	----
$3-6 million	757,000 17%	481,000 12%	3, 054,000 65%	59,000 1.5%
Less than $3 million	274,000 16%	278,000 13%	593,000 32%	----
All stations combined	696,000 8%	423,000 10%	3,925,000 53%	250,000 5.5%

Note: State funding does not include funding by state universities.
Source: CPB Research Notes, No. 61 August 1993

In addition to providing funding for stations, 23 states also help to fund interconnection networks (OSBE, 1996). Overall, state governments contributed 249 million dollars to public television in FY 1994, an eight percent increase over FY 1993. This represents about 18 percent of total station income, slightly less than the 18.5 percent the federal government contributes (CPB, 1995). Eighty-three percent of all

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stations receive some state funding (Weber, 1984). Much of the state money is earmarked for instructional programming and facilities (Rowland, 1993).

In 1973, state and local funding (including funding from state universities) accounted for 50 percent of public broadcasting revenues. By 1994, the same state sources provided only 28 percent of the system's revenues, even though state funding has increased each year. This is because private sources of income, most notably viewer donations, have increased more rapidly (CPB, 1995).

Colleges and universities contribute about nine percent to public television and businesses contribute 16 percent of station income. Overall, the largest source of funding for public television is viewers, who contribute about 22 percent of the system's revenue (CPB, 1995). This has important implications for what kind of programming is produced. In 1990, less than five percent of the average station's programming (about 47 minutes per day) was locally produced, down from more than eleven percent in 1974 (about 73 minutes per day) (CPB, 1992). Rowland (1993) explains how this is due in part to increased reliance on viewer donations: "In many of the television stations, the local program production staffs were eliminated or folded into the development office, so that the sole or major local production activities became the annual auctions or fund-raising appeals" (p. 182). In addition, national programs have larger budgets, making them more appealing to local viewers. Thus, viewers will donate more money to watch national programs than local programs.

Public Television in Indiana

Indiana has eight public television stations. Five are community stations and three are university stations. The Indiana stations formed Indiana Public Broadcasting Stations (IPBS), a nonprofit organization which lobbies the state legislature and facilitates communication between the eight stations. The state Department of Public Instruction gave IPBS $715,000 in FY 1995. Each station received 1/8 of this money ($89,375). Indiana is ranked 47th in the nation in terms of direct appropriations. The state funding represents an average of five percent of each station's budget and $0.13 per capita. For FY 1996, Indiana budgeted $105,000 per station, a 17.5 percent increase over the previous year. The state also pays each station $109 per half-hour to air certain educational programs such as GED on TV and Indiana Steps Ahead (a series for child-care providers) (Derek Redelman, executive director of IPBS, personal communication, Feb. 20, 1996). There is no state statute which requires funding for public television.

WIPB-Muncie, Indiana

Each station in Indiana has its own mission which is tailored to the community it serves. WIPB in Muncie, Indiana is licensed to Ball State University, but also has a strong community advisory board. According to Joe Misievicz, the general manager of WIPB, "The first mission is to provide national PBS service, the second mission is to provide local programs covering the diversity of our geographic area, and the third missions to provide educational support" (personal communication, April 10, 1996). Misievicz feels far more accountable to the community board than the university, partly because the university only provides ten percent of the station's $1.5 million operating budget. The state's $89,000 contribution is just six percent of the annual budget. CPB grants total $520,000, or about 1/3 of the budget. Underwriting brings in $250,000 and viewer donations an additional $210,000. The station also raises $200,000 producing corporate training videos.

In March, 1996 WIPB broadcast for approximately 17 hours per day (7:00 a.m. - midnight). For the approximately 527 hours the station was on the air that month, 25 hours consisted of locally produced programming (five percent) including 4 1/2 hours of repeats. Regularly scheduled local programs included *The Best of the Joy of Painting, Country Hit Videos, Connections,* and *The Ray McCallum Show.* Specials included *Ball State University Men's Basketball* and *Front Row Center* (Ball State Opera). It should be noted (both for WIPB and the other stations to be discussed) that March included a fundraising pledge drive. However, most fund-drive specials air during prime-time and usually replace national programming rather than local programming.

If federal funding is cut, Misievicz says the station may have to reduce local programming. This is why providing PBS service was made the most important mission. "The reason why the PBS thing got moved up was because given the potential financial cuts in federal funding, we're quite sure that we can at least continue to provide PBS programs. We don't know what the impact will be on local programs so that's why [the mission statements] got flip-flopped around from the local to the national" (Joe Misievicz, personal communication, April 10, 1996).

According to Misievicz, another strategy the station is already pursuing is becoming more attractive to underwriters. "We're one of the few stations in the country that does 30-second spots. We push the limit on underwriting. I mean, we are very legal, but we are as close to being illegal as you can get and that makes our advertisers very happy."

WFWA-Fort Wayne, Indiana

WFWA is a community station in Fort Wayne, Indiana serving about 600,000 people. Its annual budget was approximately $1.5 million for FY 1995. General Manager Roger Rhodes sees WFWA's mission as "to provide a noncommercial, educational telecommunications service" (personal communication, April 11, 1996). According to Rhodes, viewers and the station's board of directors has the strongest influence on station policies. WFWA's largest funding source is member donations which account for 35 percent of the total budget. CPB grants provide an additional 29 percent and underwriting an additional 19 percent. As with WIPB, state funds contribute only six percent to WFWA's total budget. While Rhodes would like to see a larger state contribution, he applauds the unrestricted nature of the funds. "The state government has made a very wise choice. Their funding is not tied to any specific program or program type."

In March 1996, WFWA was on the air for 547 hours. Only 3.5 hours were locally produced (less than one percent of total programming). WFWA produces one regular series, *Healthline 39,* a weekly 30-minute health call-in show. In addition, WFWA aired two locally produced specials, *Ft. Wayne Firsts* and *Ft. Wayne Memories.*

In the face of federal budget cuts, Rhodes believes the best strategy for Indiana stations is to pool their resources. "Each public television station has a certain amount of duplicated operational issues. For example, each has a separate traffic position, each has a separate promotions office, each has a separate programming department. There should be a way to combine these resources...Imagine eight stations in the state with their resources focused on a daily basis." Rhodes also believes several stations could be run from one location. But he does not believe they should necessarily form a network. "State networks require more state funding, simply because they don't have the local roots. That individualized market by market programming [without a state network] is frankly what has made the difference for Fort Wayne. That translates to dollars." Rhodes wants to add more local programming to increase the station's local identity. "We are committed to increasing our level of local programming. That is really our strongest link to the community. The more we do that, it really sets us apart from a national cable network."

WYIN-Merrillville, Indiana

WYIN is a community station in northwest Indiana that can be viewed by almost 5 million people. Its signal extends to Chicago, Illinois where it is considered to be the secondary station in the market. WTTW, a Chicago public television station, competes directly for many of the same viewers. Because of the station's location, Richard Parker, the general manager, sees its mission as "to provide noncommercial services to the people of northwest Indiana and adjoining communities" (personal communication, April 12, 1996). Only 800,000 (16 percent) of those who can receive the station's signal live in Indiana. Parker feels most accountable to the station's board of directors for his policy decisions.

Like WIPB and WFWA, WYIN has an operating budget of about $1.5 million per year. Just under 1/3 of its funding ($450,000) comes from CPB grants. The next highest source is underwriting, which accounts for 22 percent of the station's income at $325,000. Viewer donations generate $220,000 (15 percent) and the state's $89,000 allocation represents six percent of the budget.

Because WYIN is considered to be a secondary station in the market, WTTW-Chicago (the primary station) has priority in airing PBS programming. To offer a unique service, WYIN airs less PBS programming and more syndicated programming than most other public stations. Parker says WYIN also puts more emphasis on local programming. "We offer more local programming than any other station in the state. That was brought on in part because we could not make good use of PBS programming, so we had to do something different" (personal communication, April 12, 1996). In March 1996, WYIN was on the air for approximately 527 hours, 40 of which (7.5 percent) were locally produced. This included *56 News*, a 30-minute live weekday newscast, *Roundball Review*, and *Inside VU Basketball*.

In dealing with federal budget cuts, Parker says "We have to look at what is most marketable as well as what might be most underwritable." Because WYIN competes with other public stations, local programming is more important than PBS programs. "If I was in another market I could very easily say 'we're going to do away with local production and strictly carry PBS programming.'" Another dilemma for Parker is serving viewers in both Indiana and Illinois. WYIN carries shows about Indiana such as *Across Indiana* and *Indiana Lawmakers* even though more than 80 percent of the station's potential viewers live in Illinois.

WTIU-Bloomington, Indiana

WTIU is a university station licensed to the Board of Trustees of Indiana University (a public institution). Don Agostino, the general manager, reports to the Assistant Vice President for External Affairs of the Bloomington campus of Indiana University. Although the station serves a university mission by training students, Agostino describes this as "a partnership between us and the academic department." He describes a "firewall" that insulates the station from the university's public relations and government relations departments (Don Agostino, personal communication, April 12, 1996).

WTIU's budget is difficult to discern because it is normally combined with other elements of Indiana University's Radio-Television Services. The station's basic operating budget is just over $1 million, but this does not include engineering and other departments. The combined budget is just over $3 million. Of this, the largest share, $1,355,000 (43 percent) comes from Indiana University. The CPB provides $625,000 (20 percent) and the state's $89,000 contributes an additional three percent. Viewers and businesses contribute $457,000 (14 percent) and underwriting adds another $75,000 (two percent).

In March 1996, WTIU was on the air for 512 hours. This included ten hours (two percent) of local programming (including four hours of repeats). Local programs included *WTIU News Forum* (a student-produced newscast), *Editor's Desk*, and *Business Perspectives*. WTIU also broadcasts Indiana University women's basketball games.

WTIU's strategy in dealing with federal budget cuts includes expanding its coverage area. This would increase viewer donations, which already bring in more than $300,000 annually. The station has also invested in high-end graphics equipment to attract more commercial production. This has the added benefit of improving the WTIU's on-air product as well. Agostino believes WTIU must maintain some local programming to justify university and other local support. "When we argue for the maintenance of this support we have to be able to say that we're doing the things you need." He feels that WTIU must reinforce its local image in response to financial pressure. Agostino states that the "diversity and strength [of public television] comes from its local character" (personal communication, April 12, 1996).

Public Television in Kentucky

Kentucky Educational Television

The Kentucky Educational Television Network (KET) was established by the state legislature in 1962. Thus, unlike Indiana, public television in Kentucky is mandated by statute. An independent agency, the Kentucky Authority for Educational Television, was set up to hold the license and insulate the network from political interference. The governing board is made up of nine members, including two lay representatives from the Council on Higher education, the Commissioner of Education, the Deputy for Instruction, and five members who are chosen by the governor from a list provided by a select commission. KET started broadcasting in 1968.

The mission of KET is to educate Kentuckians and to "serve the unmet needs of the home/family, the institution/students, and the work force." Virginia Fox, the executive director of KET sees that mission as being essentially statutorily defined. She considers herself to be accountable to the independent agency which oversees KET. "This is a policy board. They are the ones who ultimately tell me to put my emphasis on education. Now whether I do math or science is an operational issue. And that's determined with us and the Department of Education and the schools" (Virginia Fox, personal communication, April 11, 1996).

KET's budget for FY 1995 was $23,170,000. KET received $16,545,000 from the state, which represents 71 percent of its budget. This equates to $4.59 per capita, one of the highest rates in the nation. The CPB and other federal grants contributed an additional $2,226,000 (ten percent). Subscriber and foundation donations accounted for eight percent of the budget ($1,800,000), and underwriting contributed an additional $1,400,000 (six percent).

Much of KET's programming is not broadcast on its stations. In 1995, KET produced 981 hours of programming for use in Kentucky schools. This figure is 33 times higher than the average public television station and 13 times higher than the average state network. KET produces 135 hours of local programming per year, placing it in the top third for state networks and all licensees (APTS, 1995).

KET was on the air for approximately 533 hours in March. KET produced 26 hours of local programming (five percent). Local programs include *Jubilee, Kentucky General Assembly, Comment on Kentucky, Kentucky Life,* and *Kentucky's Story*. Specials include *Dancing Threads* and *Possum on the Half Shell.* KET also aired 19 hours of local programs that were not produced by KET (3.5 percent). This included ten hours of local news produced by a commercial station and captioned by KET as well as *The Bottom Line, Inside Kentucky Schools, UK News Report, University Journal,* and *Main Street.*

KET's strategy for dealing with federal budget cuts is to focus on local service. Fox says, "My future lies in my service to the people of Kentucky. The looming CPB cuts are going to drive national programming out the window. The CPB cuts are going to impact whether or not you have PBS programming." She acknowledges that losing PBS programming would be troublesome: "Long term, local is all there is going to be for me, but short term, PBS is terribly important to me....I'm very reliant on national programming for a certain part of my audience" (Virginia Fox, personal communication, April 11, 1996).

WKPC-Louisville, Kentucky

WKPC is a community station in Louisville, Kentucky. John-Robert Curtin, the general manager, sees WKPC's mission as: "Programs for the mind as well as the eye, a dedication to lifelong learning, and community enhancement" (John-Robert Curtin, personal communication, April 12, 1996). WKPC competes with KET, which also broadcasts to Louisville.

Unlike KET, WKPC receives no state funding. The station's budget is approximately $4 million. The largest funding source is viewers, who contribute $1,100,000 (28 percent). The CPB provides 530,000 (13 percent) and underwriting adds an additional $700,000 (18 percent).

WKPC was on the air for 553 hours in March 1996. Eighteen hours (three percent) were devoted to a live fundraising auction at the beginning of the month. Of the remaining 535 hours, six hours (one percent) were devoted to local programming. Local programs include *At Issue, Government Ties, Metroscope,* and *Wade Hall's Kentucky Desk.*

To deal with federal budget cuts, Curtin believes stations need to eliminate duplicated services. WKPC is also exploring ancillary business opportunities such as renting space in its building. Curtin also feels stations may have to begin offering more than one channel in the new media environment. "It's all about shelf space. We need to be thinking more like publishers" (personal communication, April 12, 1996).

Comparing Indiana and Kentucky

The Indiana stations have different programming strategies depending on their location. WYIN in Merrillville must compete with Chicago stations that also use PBS programming. It airs the most local programming of any Indiana station (approximately 40 hours in March). WFWA in Fort Wayne aired only 3 1/2 hours of local programming in March, even though it has the same size budget as WYIN. KET, with a budget 15 times larger than most Indiana stations, airs only a few more hours of local programming (See Table 2). KET's broadcast schedule is not very different from other stations around the country.

WYIN and KET were the only two stations to air a higher than average percentage of local programming. Part of the reason for this is that they both face competition from other public television stations. WYIN is one of three public stations in its market. In Kentucky, many residents can also receive the signal of more than one public station.

However, KET also produces 981 hours of instructional television per year for Kentucky schools. Because the cost of technology has decreased, KET can transmit programs directly to schools on a satellite network. This has created space in its broadcast schedule for more general audience programs. Virginia Fox believes this change in programming helped increase the number of viewers who claimed they were "very satisfied" with KET from 35 percent to 59 percent (personal communication, April 11, 1996).

Table 2. Comparison of stations in Indiana and Kentucky. (All figures are rounded)

Budget	1,500,000	1,500,000	1,500,000	3,000,000*	23,170,000	4,000,000
State funding (% of total)	89,000 6%	89,000 6%	89,000 6%	89,000 3%	16,545,000 71%	— 0%
CPB funding (% of total)	520,000 35%	436,000 29%	450,000 30%	625,000 20%	1,600,000 7%	530,000 13%
Private funds** (% of total)	460,000 31%	788,000 53%	545,000 36%	532,000 17%	3,200,000 14%	1,800,000 45%
Local program hrs (% of total)	25 5%	3.5 1%	40 7.5%	10 2%	26 (45)*** 5% (8%)	6 1%

* Includes Educational Services.

** Includes viewer donations and local underwriting.

*** Includes local programs not produced by KET.

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Every station believes local identity is important for its survival in the face of federal budget cuts. However, the definition of local varies among stations. As Virginia Fox of KET puts it, "The state is my local and national is PBS' local. I have never thought our reason for being was to redistribute PBS programming." All the Indiana stations except for WTIU depend on local contributions for at least 30 percent of their operating budgets. By looking at the amount of local production, one realizes that local identity does not necessarily mean local programming. Instead, it means tailoring the program schedule to suit local advertisers and subscribers. The most extreme example of this is WIPB, which is contemplating eliminating local programming completely.

KET on the other hand, receives only 14 percent of its budget from local viewers and businesses. Since KET was established in 1962, its mission has been to provide instructional television. As a state network, KET perceives itself differently than other public television stations. "One of the differences between being a community licensee and being a state network is that I feel like we're an institution like a university. So my job is to ensure the *stability and the indispensability of the institution*. National programming is not what makes me indispensable" (Virginia Fox, personal communication, April 12, 1996) (emphasis added).

Lashley (1992) considers this focus on institutional survival to be a characteristic of the public broadcasting system: "From its inception, public broadcasting has languished amidst a sea of budgetary and political uncertainty. Usually, public broadcasting is compelled to cope with this uncertainty by...redefining its mission, means, and form in order to survive as a public organization" (p. xix). Since KET is heavily dependent on state funding, most of its production is focused on instructional television for schools--a primary concern of the state.

The relative absence of state funding for Indiana stations explains their focus on attracting subscribers and underwriters through general programming. While the Indiana stations are discussing pooling some of their resources to cut costs and offer package deals to regional advertisers, they strongly resist any loss of control over their local schedules. As Roger Rhodes of WFWA put it, "State networks require more state funding...because they don't have local roots....[They] can't leverage local funds" (personal communication, April 11, 1996). John-Robert Curtin of WKPC competes directly with the Kentucky network. He argues that state networks cannot serve local communities adequately. "State networks have to keep everything so statewide that they can't get involved with the local specifics that need to be done" (personal communication, April 12, 1996). Local stations nationwide have made the same argument in resisting centralized control of PBS. James Day (1995) refers to the current structure of public television as being "balkanized into more than a hundred competing fiefdoms...and its loosely joined elements neither having nor wanting strong national leadership" (p. 2).

Conclusion

There's no such thing as a free lunch for public television stations. Indiana stations, which depend heavily on viewer support, must tailor their mission to those viewers and businesses which are willing to fund the station. Therefore they resist any change which might wrest control of the station's identity out of their hands. A separate distribution system, distinct from public television was established by the Indiana General Assembly to serve the state's educational needs. Thus, Indiana stations must focus more of their energy on raising private funding and pooling their resources. But even with more cooperation, each station will fight to maintain its unique identity in order to justify its existence.

KET, as a state agency, depends on state funding for most of its revenues. As a result, KET focuses most of its resources on fulfilling its state-mandated educational mission. This fits with Lashley's (1992) description of how public organizations are dependent on "political markets rather than economic markets" for their survival. As long as KET serves an educational need, the Kentucky legislature is likely to continue its high level of support. This is why KET has established a satellite distribution service to schools and is also experimenting with connecting schools to the Internet and conducting electronic "field trips." By taking advantage of new technology, KET sustains its relevance to the state.

Although KET is a large state network with a $23 million budget, its general broadcast service is little different than what is provided by stations in Indiana that exist on a $1.5 million dollar budget. Why, given the vast difference in state involvement, are the programming schedules in Indiana and Kentucky so similar? The answer lies in the economics of broadcasting. Quality productions generally require enormous resources. For example, the average commercial network prime time program cost $1 million per hour to produce. PBS programs cost an average of $150,000 per hour to produce. With a $1.5 million budget, a station could only produce ten hours of PBS programming. Even KET, with its $23 million annual budget, would only be able to produce 153 hours--less than two months worth of prime-time programming. To keep its state funding, KET must use most of its money to produce instructional programming. For general audiences, KET must rely on the same sources of national programming as the Indiana stations. So while the taxpayers of Kentucky do receive almost 1000 hours of *classroom* programming paid for by the state, their public television fare remains roughly the same as that seen by viewers to the north in Indiana.

States can have a tremendous influence on the structure and mission of public television stations. But they exert little influence over the programming service that is made available to most Americans. The economics of television production make it difficult for any influence to be felt on general programming except at a national level. In an age of proliferating cable channels and other program delivery systems for the general audience, states facing educational crises are unwilling to spend their limited funds on anything other than instructional television.

For all the hue and cry that public broadcasting is supposed to serve the local community, none but the largest community stations can offer anything but a smattering of local programs. State funding, as this research has shown, comes with its own inherent restrictions. Ironically, it appears as though only an increase in federal funding will have a major impact on local programming. As long as the current trend of shifting the funding burden to viewers continues, stations will rely more heavily on popular national programming to increase viewer donations.

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Do Employee Ethical Beliefs Affect Advertising Clearance Decisions at Commercial Television Stations?*

By:

Dr. Jan LeBlanc Wicks
Journalism Department
116 Kimpel Hall
University of Arkansas
Fayetteville, AR 72701-0116
Office: 501-575-6304
Home: 501-521-2319
Fax: 501-575-4314
E-mail: jwicks@comp.uark.edu

and

Dr. Avery Abernethy
Dept. of Marketing & Transportation
201 Business Building
College of Business Administration
Auburn University, AL 36849
Office: 334-844-2458

Accepted for presentation to the Media Management & Economics Division of the Association for Education in Journalism & Mass Communication 1997 National Convention in Chicago, Illinois.

*Placed Third in the Media Management & Economics Division's Top Faculty Paper Competition

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Advertising clearance (or deciding whether to reject ads) has become more important because of the FTC chairman's call for improved clearance and the airing of liquor advertisements. A national mail survey was conducted, with responses from over 350 stations, to discover whether employees who consider ethical beliefs important exhibit different clearance behaviors than employees who consider beliefs to be of lesser importance. Findings suggest that certain beliefs are associated with more stringent ad clearance decisions.

Do Employee Ethical Beliefs Affect Advertising Clearance Decisions at Commercial Television Stations?

Introduction

Advertising clearance (or the decision made by individual media vehicles to accept, reject or request substantiation of ad claims) has always been a potentially powerful form of advertising self-regulation. Excepting some political ads, television stations have the power to reject any commercial submission for any reason. Recently, advertising clearance has become even more important.

In 1985 the Federal Communication Commission (FCC) relaxed the rules concerning individual station monitoring for deceptive advertising. Instead of requiring strict policies and procedures for each station, the FCC instead thought market forces and the individual judgment of broadcasters would prevent abuses (Elimination, 1985). This self-regulatory environment makes the decisions of individual television stations a critical component of the consumer protection process. But even the Federal Trade Commission (FTC) Chairman Robert Pitofsky notes that self-regulation is not completely effective and encouraged improved media clearance to "prevent ads with facially implausible claims from continuing to 'slip through the cracks'" (FTC's Pitofsky, 14 March 1996).

Perhaps the best example of the changed self-regulatory environment is the airing of television advertisements for Seagram's Crown Royal Canadian Whisky which broke a voluntary distilled spirits industry TV advertising ban in effect since 1948 (Goldman, 1996, p. 17). Given the FTC chairman's call for improved media clearance and the recent airing of liquor ads, there is some question that the post-1985 self-regulatory environment is providing an adequate screen against false, deceptive or inappropriate television advertisements.

Past research examining broadcasters' ethical beliefs suggests that factors like personal ethics, earning high profits and station image are considered when clearing ads (Rotfeld, Abernethy & Butler, 1990; Rotfeld, Abernethy & Parsons, 1990; Rotfeld & Parsons, 1989; Rotfeld, Parsons, Abernethy & Pavlik, 1990; Wicks, 1994, 1997). However, no study has specifically examined whether employees who consider ethical beliefs important when clearing ads actually exhibit different advertising clearance behaviors compared to employees of stations who consider ethical beliefs to be of lesser importance.

A national mail study was conducted, with responses from more than 350 commercial US television stations, to discover the relationship between the ethical beliefs of employees reviewing commercial submissions and their station's clearance decisions. The clearance decisions or outcomes examined were whether: 1) more types of ads are banned outright; 2) a higher percentage of ad submissions are rejected; 3) a higher percentage of advertising substantiation requests are made, and 4) fewer previously refused ads are accepted upon resubmission by the advertiser after changes are made. Each clearance outcome is examined to see whether employees' beliefs regarding the importance of personal ethics, earning high profits, viewer complaints and the potential of complaining advertisers to cancel ad schedules results in different clearance practices. Other organizational and market factors which might affect clearance decisions are also examined.

Results may identify whether certain ethical beliefs are associated with more stringent ad clearance practices. If so, results could suggest appropriate content of education programs for employees designed to improve ad clearance. Such education programs would aid broadcasters in serving the public interest and responding to the FTC's call for improved media clearance.

Literature Review

Greater willingness to run ads deemed unacceptable for broadcast prior to 1985, like the broadcast of liquor ads, arose from several factors. First, the National Association of Broadcaster's (NAB) TV Code was abandoned as a result of an anti-trust action (US v NAB, 1982). "NAB employees interpreted Code guidelines and reviewed commercials for agencies and advertisers prior to submission for possible broadcast" (Rotfeld, Abernethy & Butler, 1990, p. 299). So the NAB Code provided ad clearance guidance to advertisers and ad agencies, as well as member and non-member NAB stations (Rotfeld, Abernethy &

Butler, 1990). When the Code was abandoned, an important source of guidance about ad clearance was lost.

Second, the FCC deregulated commercial television in 1984. When lifting its 16 minute per hour commercial time guideline, the FCC said that market forces would prevent the broadcast of too many commercials. The FCC concluded that deregulating its commercialization policies would "promote licensee experimentation and otherwise increase commercial flexibility" (Revision, 1984, p. 1105). Deregulation thus set the stage for experimentation in commercial acceptance.

Third, the FCC deregulated ad clearance practices (Elimination, 1985). Requirements to: 1) have at least one employee stay abreast of ads under FTC review and other obvious areas of concern; 2) conduct background checks of prospective advertisers; 3) review ads and ad copy; and 4) request substantiation of dubious ad claims were dropped (Alan Neckritz, 1971; Center, 1971; Elimination, 1985; KMPC, 1939). After deregulation, clearance responsibility became how licensees interpreted the following policy statement:

> "Broadcasting licensees must assume responsibility for all material which is broadcast through their facilities. This includes all programs and advertising material which they present to the public. With respect to advertising material, the licensee has the additional responsibility to take all reasonable measures to eliminate any false, misleading or deceptive matter...This duty is personal to the licensee and may not be delegated" (En banc, 1960, p. 2313).

Given the deregulation of ad clearance practices, what do clearance employees consider when they screen ads for broadcast? An employee's ethical values and philosophies enter into clearance decisions (Rotfeld, Abernethy & Butler, 1990; Rotfeld, Abernethy & Parsons, 1990; Rotfeld & Parsons, 1989; Rotfeld, Parsons, Abernethy & Pavlik, 1990; Wicks, 1994). The pressure to earn profits might make personnel more likely to accept ads (Trevino, 1986). Cable network consider whether an ad is in good taste, might offend viewers and had credible claims (Hayes & Rotfeld, 1989, 1988).

Employees consider whether airing an ad reflects negatively on station image. They also want to avoid ads which "look like a rip-off" and appear to include misleading claims. Personal ethical beliefs also prevent some managers from accepting questionable ads like sexually suggestive ads or those for baldness cures (Rotfeld, Abernethy & Butler, 1990; Wicks, 1994, 1997).

Employees feel obligated to accept ads they might not otherwise accept when competing stations air them (Wicks, 1994). Economic theory suggests this type of behavior occurs in concentrated markets like oligopolies, which have few competitors who consider each others' reactions when making decisions (Scherer, 1970). Many local TV markets are oligopolies. And the FCC's suggested that market forces play a role in ad clearance. So market factors may affect ad clearance.

Employees may also consider potential viewer complaints when clearing ads. VCR owners, cable subscribers and 18-34 year old viewers notice when stations increase the number of commercials or air questionable ads (Mord & Gilson, 1985; Wicks, 1991a). Radio station employees may contact advertisers regarding a complaint and review an offending commercial again (Rotfeld & Abernethy, 1992). Indeed, "the perception of what content 'viewers will accept' is...important, with effect on station image being 'critical'" (Wicks, 1993, p. 94).

Some stations have written and/or verbal ad clearance standards to aid employees in avoiding viewer or advertiser complaints. As organization size increases, communication becomes more difficult (Dubin, 1958). So guidelines may be developed to standardize operations and limit direct supervision to extraordinary situations (Blau, 1974). Larger organizations may communicate rules in writing, while rules may be communicated verbally at smaller stations (Rushing, 1980). Organizational policies influence a manager's ethical decision making (Hunt, Wood & Chonko, 1989; Trevino, 1986).

While larger stations tend to have more ad standards, stations of all sizes tend to communicate ad policies or standards verbally (Wicks, 1991a). Stations that have written policies tend to request substantiation of ad claims and reject ads more often (Parsons & Rotfeld, 1990; Rotfeld, Abernethy & Parsons, 1990; Wicks, 1991, 1994). So the presence of ad clearance guidelines, especially written ones, seems important.

Stations affiliated with ABC, CBS and NBC appear more likely to have written policies and stay abreast of FTC ad cases. They tend to have clearance standards regarding more policy areas (e.g., contraceptive ads) and practices (e.g., limiting commercial interruptions) than Fox and independent stations do. These network affiliates, which tend to broadcast on the VHF band, ban more types of questionable ads (e.g., X or R rated movie ads, Wicks, 1991a). Employees at VHF stations tend to considering earning the highest possible profits when clearing ads, suggesting that rejecting more questionable ads may make the station more attractive to reputable advertisers (Wicks, 1994).

Hypotheses

When deregulating commercial TV, the FCC stated the individual judgment of managers would prevent abuses. Past research has suggested that managerial ethical beliefs may affect the clearance of infomercials but may not be as important as other factors (Wicks, 1993, 1994). The literature review also suggests that employees at network affiliates (which are often VHF stations) and stations with written policies tend to ban more ads and request substantiation more often. Larger stations, which are often in larger markets, tend to have more policies and may thus refuse more ads. Stations in markets with higher cable penetration may refuse more ads because viewers are more likely to notice new ad types. Thus, the following hypotheses stem from the literature review.

Hypothesis 1: Employees who say they consider certain ethical values important work at stations having more stringent ad clearance practices (e.g, more types of ads are banned outright, a higher percentage of ad submissions are rejected, a higher percentage of advertising substantiation requests are made, and fewer previously refused ads are accepted upon resubmission by the advertiser after changes are made).

Hypothesis 2: Employees who say they consider certain ethical values important are more likely to work at larger stations, stations with written clearance standards, and stations affiliated with ABC, CBS and NBC.

Hypothesis 3: Employees who say they consider certain ethical values important are more likely to work in larger markets and markets with higher cable penetration.

Previous research did not suggest whether a manager's years of experience would make him/her more likely to hold ethical beliefs important. So this relationship was posed as a research question:

> "Is a manager's experience related to holding ethical beliefs important?" or
> "Are more or less experienced managers more likely to hold ethical beliefs important?"

Methods

A mail questionnaire was developed based on past research and an in-depth interview with a sales manager at a network affiliated station. Three pretests were conducted to ensure items were understood correctly and the questionnaire was easy to complete quickly. All commercial television stations listed in the 1996 Broadcasting Cable Yearbook (excluding religious, home shopping and satellite stations which carry the signal of another station) were mailed a questionnaire so results would be generalizable to stations nationwide.

Sales managers were polled because they are often responsible for, are included in, and/or are informed about ad clearance. They also supervise the sales and traffic departments which are responsible for ad content and scheduling (Wicks, 1991a). As a check, the cover letter included instructions to give the questionnaire to the employee who was primarily responsible for ad clearance. The main mailing and two follow-ups were conducted in the summer of 1996.

Ethical belief items were developed based on the in-depth interview with a sales manager and previous clearance research noted in the literature review. The ethical beliefs factors, operationalized as bipolar rating scales, were measured as follows:

> "Please indicate how important each of the following statements is considered when deciding whether to refuse to air an ad. (Check the space which represents how important each statement is considered when clearing an ad.)

The ad violates my personal ethical values.
Very Not
Important_____ :: ______ :: ______ :: ______ :: ______ :: ______ :: _____Important
(7 6 5 4 3 2 1)

Each of the following ethical belief statements was measured in this same way:

"The ad violates my personal ethical values."

"The ad's content is in poor taste (e.g., ad content would offend most viewers in your community)."

"Avoid negative reactions, such as complaints from viewers."

"Avoid negative reactions, such as advertisers canceling ad schedules."

"Serve the public interest, convenience and necessity."

"Maintain a positive station image in the community."

"Earn the highest possible profits for my station."

"Protect the audience from ads selling questionable, "rip-off" type products and services."

The goal of the study was to find out whether employees who felt certain ethical items were important worked at stations where: 1) more types of ads were banned; 2) refused a larger proportion of ad submissions; 3) ad substantiation was requested more often; and 4) fewer ads which were originally rejected but then resubmitted with changes making them acceptable were accepted for broadcast. These clearance outcomes are based on past research (e.g., Rotfeld, Abernethy & Butler, 1990; Rotfeld, Abernethy & Parsons, 1990; Rotfeld, Parsons, Abernethy & Pavlik, 1990; Wicks, 1991, 1994). Responses were coded as follows. Employees who checked the space representing 5, 6 or 7 shown above were coded as considering that item important. Employees who checked 1 through 4 for that item were coded as not considering that item important.

Network affiliation was coded by indicating whether the station was an ABC, NBC, CBS, Fox or Independent/Other station. To measure the type of advertising policy a station had, respondents indicated whether their stations had no policies, verbal, written or written and verbal policies (Wicks, 1991). The written and written and verbal responses were combined into one "written" category. Broadcast band was coded by indicating whether the station broadcast on the VHF or UHF band. Market size was measured by the number of television households in a station's ADI or TV market (e.g., New York City). Cable penetration was measured by the percentage of ADI TV households which subscribe to a cable system (Broadcasting Cable Yearbook 1996; Wicks, 1997). Station size was measured by asking respondents to estimate the number of people employed full-time at the station. Employee experience was measured by asking respondents the number of years they have worked in commercial television .

Measures of the dependent variables are now explained. The number of ad types banned was measured by having respondents indicate how likely they were to ban a few ad categories which past research indicated were controversial (e.g., psychic ads, 900 phone number ads and ads simulating newscasts and news reports). Respondents also indicated in an open-ended question other types of ads their stations never accepted. Responses to both of these questions were totaled to obtain the number of ad types banned.

Ad substantiation was measured as follows:

"On average, considering all standard ads (e.g., 30- or 60-sec.) submitted to air on your station per month, for what percentage do you ask for substantiation (e.g., of an ad's content or the safety/validity of the product being sold)?

(If you ask for substantiation for 5% of all standard ads submitted per month,

write in 5%.)____"

Ad rejection was measured as follows:

"On average, what percentage of all standard ad (30-sec.) submissions has your station rejected--for any reason--during the past month?

(If you rejected 2% of all standard ads submitted for airing last month,

write in 2%)____"

The percentage amounts included in the previous measures were based on past research.

Acceptance of resubmitted ads previously refused was measured as follows:

"Of the standard ads rejected, how often are they resubmitted with changes that make them acceptable for broadcast?

Always______ :: ______ :: ______ :: ______ :: ______ :: ______ :: ______ Never"

T-tests of the Important/Not Important groups for each ethical belief item were conducted on interval level dependent and control variables. Crosstabs or chi-squares were conducted for control variables measured at the nominal or ordinal levels.

It is possible that some personal ethical belief items may be considered important by the majority of clearance employees. The focus of the study is to examine whether clearance practices varied between employees finding a clearance belief statement important or not important. Consequently, any items which were considered important by a majority of respondents (e.g., more than 80%) were excluded from the analysis.

Results

The mail survey response rate was 40.6% (364 of 896, excluding undeliverable mailings). Frequencies for the ad clearance ethical belief statements (see Table 1) showed that four were important to the majority of respondents (or more than 80% indicated they were important). These four statements were excluded from the analysis. The statements retained for analysis are:

"The ad violates my personal ethical values."

"Avoid negative reactions, such as complaints from viewers."

"Avoid negative reactions, such as advertisers canceling ad schedules."

"Earn the highest possible profits for my station."

Hypothesis 1 posited that employees who consider statements important work at stations having more stringent clearance practices. Results for the number of ad types banned were significant but do not support the hypothesis (see Table 2). Employees who considered personal ethical values more important worked at stations where more ad types were banned. However, those considering high profits and canceled ad schedules important worked at stations banning fewer ad types. Perhaps employees having certain ethical values tend to work at organizations which foster those same values.

Results for the percentage of ads rejected partially support Hypothesis 1. Mangers who considered personal ethics and viewer complaints important rejected more ads (see Table 2). Results were in the expected direction but not significant for highest possible profits and canceled ad schedules. Substantiation request results were partially supported as well. While managers who found all four statements important made more substantiation requests, results were significant only for the personal ethics and viewer complaint items. Finally, resubmission results were significant for personal ethics and canceled ad schedules. Managers considering personal ethics and canceled ad schedules important accepted fewer resubmitted ads. Thus results partially support Hypothesis 1.

Hypothesis 2 predicted that employees considering the ethical statements important are more likely to work at larger stations, stations with written clearance standards and stations affiliated with ABC, CBS and NBC. Results are significant but not as expected for station size. Managers who consider personal ethics, highest profits, viewer complaints and advertiser complaints are significantly more likely to work at smaller stations (see Table 3). Perhaps station philosophies are communicated better among employees in smaller stations. Or the chance to get to know fellow employees better allows more give-and-take in making clearance decisions. Employees can make a case for refusing an ad on a personal level.

Only managers who consider viewer complaints important are more likely to work at stations having written ad policies, or even verbal ad policies (see Table 4). Perhaps these policies were developed based on past complaints to avoid future complaints. For affiliation status, managers considering highest profits, viewer complaints and canceled ad schedules important work at CBS, ABC or NBC affiliates, as predicted. For broadcast band, managers who find highest profits and canceled ad schedules important tend to work at VHF stations, as expected. Hypothesis 2 is partially supported.

Hypothesis 3 stated that employees who consider ethical values important are more likely to work in larger markets and markets with higher cable penetration. Hypothesis 3 is not supported as results were not significant for any belief statement. Managers who consider factors important are not more likely to work in larger, more competitive markets.

Finally, the research question asked whether an employee's experience seems related to his/her having strongly held ethical beliefs. Managers who felt highest profits, viewer complaints and canceled ad schedules were important had significantly fewer years of experience than those believing such statements not important. Results were in the same direction but not significant for personal ethical values.

Discussion

Results suggest that employees who consider their personal ethical values important are willing to take a stand to promote those values. And that stand results in significantly different clearance outcomes which seem to protect viewer and advertiser interests. These employees may more likely be found at smaller organizations, where they can make a case for rejecting an ad personally with an administrator. Or they supervise others who follow their ethical guidelines. This seems to hold true for more or less experiences employees.

Employees who find it important to avoid negative reactions like viewer complaints request substantiation for ad claims and reject ads more often. Again a personal commitment to ethical concerns seems to result in viewer protection. Education programs aimed at developing personal ethical values in clearance employees would be useful.

Employees who feel earning the highest possible profits is important seem to work at stations that refuse fewer ads. Employees who find it important to avoid canceled ad schedules work at stations banning fewer ads outright and rejecting fewer resubmitted ads. When the profit motive is important, it appears that employees are willing to "give" more, being more likely to do whatever it takes to earn additional advertising revenue.

Thus, education programs which promote the value of protecting viewer interests rather than relying on a profit motive could change clearance outcomes. Employees could consider what the true meaning of their legal mandate, serving the public interest, convenience and necessity, truly is. Whether airing a psychic ad is inconsistent with the public interest is a matter of debate. Yet an ethical discussion among employees as to why an ad for a psychic service which has no proof of offering tangible benefits to viewers should or should not be banned would send a message that profits are not always the most important consideration. And an ethical discussion on whether distilled spirits advertising encourages young viewers to drink hard liquor seems consistent with serving the public interest. Especially if such discussions were sponsored or sanctioned by station management.

Perhaps this is why clearance employees at smaller stations seemed more likely to find all four ethical beliefs important. The ethical or philosophical values inherent to their stations' culture can be communicated more effectively. If so, this also suggests that education programs regarding ethical beliefs would be useful. It appears that the chance to discuss or consider ethical concerns on a more personal level results in different clearance outcomes.

These education programs may be helpful to less experienced employees who seemed more likely to consider highest profits, viewer complaints and canceled ad schedules important. Perhaps they need education and advice on how to avoid such complaints and cancellations, protect viewer and advertiser interests, yet earn the highest possible profits for their stations. More experienced employees or outside specialists may be able to provide insight on dealing with balancing station and constituents' interests.

Conclusions

Future research using qualitative methods might be useful in examining first-hand the discussions and ethical conflicts (or lack thereof) that occur when clearance decisions are made. Such research would provide the basis for educational programs intended to promote clearance effectiveness. This would aid employees in meeting FTC Chairman Pitofsky's call for improved clearance to prevent ads with obviously deceptive claims from airing.

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Table 1

Frequencies of Clearance Ethical Belief Statements

Ethical Belief Statement	Number/Percent Considering Not Important	Important
The ad violates my personal ethical values.	245 (67.5%)	118 (32.5%)
The ad's content is in poor taste (e.g., ad content would offend most viewers in your community).	36 (9.9%)	327 (90.1%)
Avoid negative reactions, such as complaints from viewers.	188 (51.8%)	175 (48.2%)
Avoid negative reactions, such as advertisers canceling ad schedules.	167 (46.1%)	195 (53.6%)
Serve the public interest, convenience and necessity.	35 (9.6%)	328 (90.4%)
Maintain a positive station image in the community.	30 (8.3%)	333 (91.5%)
Earn the highest possible profits for my station.	142 (39.1%)	221 (60.7%)
Protect the audience from ads selling questionable, "rip-off" type products and services.	40 (11.0%)	323 (89.0%)

Table 2

T-tests of Clearance Ethical Beliefs (one-tailed tests) by Clearance Outcomes

Comparisons	Mean	T	Sig	DF
The ad violates my personal ethical values				
Number of Ad Types Banned				
Not Important (n=245)	1.5878	-2.60	.005	361.00
Important (n=118)	2.0508	-2.43	.008*	195.48+
% of Ad Substantiation Requests				
Not Important (n=223)	6.6547	-2.11	.017	324.00
Important (n=103)	11.8835	-1.82	.036*	142.86+
% of Ads Rejected				
Not Important (n=229)	1.3275	-2.36	.009	335.00
Important (n=108)	2.2315	-1.84	.034*	126.33+
How Often Rejected Ads Resubmitted?				
Not Important (n=199)	3.2915	1.85	.032*	292.00
Important (n=95)	2.8737	1.86	.032	186.14+
Earn the highest possible profits for my station				
Number of Ad Types Banned				
Not Important (n=142)	1.9859	2.41	.008*	312.00+
Important (n=221)	1.5792			
% of Ad Substantiation Requests				
Not Important (n=128)	6.9688	-.93	.176	324.00
Important (n=198)	9.1717			
% of Ads Rejected				
Not Important (n=131)	1.5954	-.10	.461	335.00
Important (n=206)	1.6311			
How Often Rejected Ads Resubmitted?				
Not Important (n=115)	3.1565	.00	.500	292.00
Important (n=179)	3.1564			

Note: Plus or "+" indicates a separate variance estimate (SVE) (rather than a pooledvariance estimate) t-test. SVE t-tests are used when variances within groups appear unequal. The SVE is used whenever probabilities for the F-Test for equality of variance are "small." So the SVE was used whenever the F-Test significance level was .10 or below.

*Denotes significance at the indicated level. One-tailed tests.

Table 2 (continued, p. 2)

T-tests of Clearance Ethical Beliefs (one-tailed tests) by Clearance Outcomes

Comparisons	Mean	T	Sig	DF
Avoid negative reactions, such as complaints from viewers				
Number of Ad Types Banned				
Not Important (n=188)	1.7234	-.18	.427	361.00
Important (n=175)	1.7543	-.18	.427	356.95+
% of Ad Substantiation Requests				
Not Important (n=172)	5.2267	-2.85	.002	324.00
Important (n=154)	11.7468	-2.77	.003*	240.83+
% of Ads Rejected				
Not Important (n=176)	1.2159	-2.35	.009	335.00
Important (n=161)	2.0559	-2.27	.012*	202.71
How Often Rejected Ads Resubmitted?				
Not Important (n=149)	3.2617	1.01	.157	292.00
Important (n=145)	3.0483	1.01	.157	291.98+
Avoid negative reactions, such as advertisers canceling ad schedules				
Number of Ad Types Banned				
Not Important (n=167)	1.9042	1.84	.033*	360.00
Important (n=195)	1.5949			
% of Ad Substantiation Requests				
Not Important (n=153)	6.8497	-1.21	.113	319.45+
Important (n=172)	9.6221			
% of Ads Rejected				
Not Important (n=160)	1.4438	-.94	.174	321.91+
Important (n=176)	1.7784			
How Often Rejected Ads Resubmitted?				
Not Important (n=142)	3.4225	2.51	.006*	291.00
Important (n=151)	2.9840			

Note: Plus or "+" indicates a separate variance estimate (SVE) (rather than a pooledvariance estimate) t-test. SVE t-tests are used when variances within groups appear unequal. The SVE is used whenever probabilities for the F-Test for equality of variance are "small." So the SVE was used whenever the F-Test significance level was .10 or below.

*Denotes significance at the indicated level. One-tailed tests.

Table 3

T-tests of Clearance Ethical Beliefs by Station and Market Variables

Comparisons	Mean	T	Sig	DF
The ad violates my personal ethical values				
Years of Experience in Commercial TV				
Not Important (n=244)	16.4672	.89	.185	359.00
Important (n=117)	15.5983			
Station Size or Estimated # of Employees				
Not Important (n=241)	80.9004	-1.21	.031*	356.00
Important (n=117)	68.6068			
Market Size or No. of ADI TV Hshlds.				
Not Important (n=245)	630163.102	1.34	.091	361.00
Important (n=118)	499666.864			
Market Competition or Cable Penetration				
Not Important (n=245)	63.0033	-1.33	.091	361.00
Important (n=118)	64.2449			
Earn the highest possible profits for my station				
Years of Experience in Commercial TV				
Not Important (n=142)	17.7817	2.84	.002*	359.00
Important (n=219)	15.1507			
Station Size or Estimated # of Employees				
Not Important (n=140)	92.5643	4.12	.000*	287.73+
Important (n=218)	66.8119			
Market Size or No. of ADI TV Hshlds.				
Not Important (n=131)	602373.028	.26	.399	361.00
Important (n=206)	578342.443			
Market Competition or Cable Penetration				
Not Important (n=115)	63.5937	.34	.366	361.00
Important (n=179)	63.2869			

Note: Plus or "+" indicates a separate variance estimate (SVE) (rather than a pooledvariance estimate) t-test. SVE t-tests are used when variances within groups appear unequal. The SVE is used whenever probabilities for the F-Test for equality of variance are "small." So the SVE was used whenever the F-Test significance level was .10 or below.

*Denotes significance at the indicated level. One-tailed tests.

Table 3 (continued, p. 2)

T-tests of Clearance Ethical Beliefs by Station and Market Variables

Comparisons	Mean	T	Sig	DF
Avoid negative reactions, such as complaints from viewers				
Years of Experience in Commercial TV				
Not Important (n=188)	17.4894	3.01	.001*	359.00
Important (n=173)	14.7688			
Station Size or Estimated # of Employees				
Not Important (n=186)	84.0914	2.44	.007*	356.00
Important (n=172)	69.0872			
Market Size or No. of ADI TV Hshlds.				
Not Important (n=188)	590459.043	.06	.475	361.00
Important (n=175)	584824.857			
Market Competition or Cable Penetration				
Not Important (n=188)	63.1537	-.60	.274	361.00
Important (n=175)	63.6789			
Avoid negative reactions, such as advertisers canceling ad schedules				
Years of Experience in Commercial TV				
Not Important (n=167)	17.5689	2.85	.002*	358.00
Important (n=193)	14.9793			
Station Size or Estimated # of Employees				
Not Important (n=165)	88.8424	3.63	.000*	355.00
Important (n=192)	66.6719			
Market Size or No. of ADI TV Hshlds.				
Not Important (n=167)	632064.192	.89	.187	360.00
Important (n=195)	550297.641			
Market Competition or Cable Penetration				
Not Important (n=167)	63.0946	-.61	.271	360.00
Important (n=195)	63.6287			

Note: Plus or "+" indicates a separate variance estimate (SVE) (rather than a pooledvariance estimate) t-test. SVE t-tests are used when variances within groups appear unequal. The SVE is used whenever probabilities for the F-Test for equality of variance are "small." So the SVE was used whenever the F-Test significance level was .10 or below.

*Denotes significance at the indicated level. One-tailed tests.

Table 4

Crosstabs of Clearance Ethical Beliefs by Station and Market Variables

	Clearance Beliefs by Type of Advertising Policy						
	No Policy	Verbal	Written	Row Total/%	X2	df	p
Personal Ethics							
Not Important	34	104	107	245 (67.5%)	.31	2	.335
Important	10	53	55	118 (32.5%)			
Column Total/%	44 (12.1%)	157 (43.3%)	162 (44.6%)				
Highest Profits							
Not Important	11	60	71	142 (39.1%)	5.45	2	.065
Important	33	97	91	221 (60.9%)			
Column Total/%	44 (12.1%)	157 (43.3%)	162 (44.6%)				
Viewer Complaints							
Not Important	14	86	88	188 (51.8%)	8.13	2	.017*
Important	30	71	74	175 (48.2%)			
Column Total/%	44 (12.1%)	157 (43.3%)	162 (44.6%)				
Adv. Complaints							
Not Important	15	69	83	167 (46.1%)	4.82	2	.089
Important	29	88	78	195 (53.9%)			
Column Total/%	44 (12.2%)	157 (43.4%)	161 (44.5%)				

	Clearance Beliefs by Network Type								
	CBS	ABC	NBC	FOX	IND	Row Tot/%	X2	df	p
Personal Ethics									
Not Important	58	49	51	36	51	245 (67.5%)	4.22	4	.376
Important	25	26	16	19	32	118 (32.5%)			
Column Total/%	83	75	67	55	83	363			
	(22.9)	(20.7)	(18.5)	(15.2)	(22.9)				
Highest Profits									
Not Important	38	29	38	14	23	142 (39.1%)	19.29	4	.000*
Important	45	46	29	41	60	221 (60.9%)			
Column Total/%	83	75	67	55	83	363			
	(22.9)	(20.7)	(18.5)	(15.2)	22.9)				
Viewer Complaints									
Not Important	45	40	44	27	32	188 (51.8%)	11.55	4	.020*
Important	38	35	23	28	51	175 (48.2%)			
Column Total/%	83	75	67	55	83	363			
	(22.9)	(20.7)	(18.5)	(15.2)	(22.9)				
Adv. Complaints									
Not Important	44	37	42	19	25	167 (46.1%)	20.81	4	.000*
Important	39	38	25	35	58	195 (53.9%)			
Column Total/%	83	75	67	54	83	362			
	(22.9)	(20.7)	(18.5)	(14.9)	(22.9)				

*Denotes significance at indicated level

Table 4 (continued, p. 2)

Crosstabs of Clearance Ethical Beliefs by Station and Market Variables

	Clearance Beliefs by Broadcast Band UHF	 VHF	Row Total/%	X2	df	p
Personal Ethics						
Not Important	111	134	245 (67.5%)	1.67	1	.196
Important	62	56	118 (32.5%)			
Column Total/%	173 (47.7%)	190 (52.3%)	363			
Highest Profits						
Not Important	55	87	142 (39.1%)	7.49	1	.006*
Important	118	103	221 (60.9%)			
Column Total/%	173 (47.7%)	190 (52.3%)				
Viewer Complaints						
Not Important	81	107	188 (51.8%)	3.27	1	.070
Important	92	83	175 (48.2%)			
Column Total/%	173 (47.7%)	190 (52.3%)	363			
Adv. Complaints						
Not Important	68	99	167 (46.1%)	5.75	1	.016*
Important	104	91	195 (53.9%)			
Column Total/%	172 (47.5%)	190 (52.5%)	362			

*Denotes significance at indicated level

Job Satisfaction Among Journalists at Daily Newspapers: Does Size of Organization Make a Difference?

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Kris P. Kodrich and Randal A. Beam
School of Journalism
Indiana University
Bloomington, IN 47401
(812) 857-7624
(812) 855-2841
kkodrich@indiana.edu

Job Satisfaction Among Journalists at Daily Newspapers: Does Size of Organization Make a Difference?

Abstract

This study examines the relationship between job satisfaction of journalists at daily newspapers and organizational size. Past studies have shown that the size of an organization may play a role in job satisfaction. A secondary analysis of data from a survey of 636 daily newspaper journalists shows that while journalists at newspapers of different sizes are satisfied with their jobs for mainly the same reasons, a few differences do surface. This multiple-regression analysis shows the strongest overall predictor of job satisfaction is whether journalists think their organization is doing a good job of informing the public. For journalists at medium-sized papers, this was the No. 1 predictor, but not at the small and large papers. For those journalists, the strongest predictor was their intention to stay in the news media. A comparison with data from a decade earlier shows that the strongest overall predictor of job satisfaction has remained the same, but several new predictors have surfaced. This study concludes with several recommendations to newsroom managers to maintain and improve their employees' job satisfaction. These recommendations include: emphasize high-quality reporting and investigation; comment often on employee's work; encourage those who want to stay at the newspaper by offering advancement opportunities and incentives; give reporters freedom to choose stories they want to work on; listen to and act upon employees' suggestions for stories.

Submitted to Media Management and Economics Division

Kris P. Kodrich and Randal A. Beam
School of Journalism
Indiana University
Bloomington, IN 47405
(812) 855-2841
kkodrich@indiana.edu

Job Satisfaction Among Journalists at Daily Newspapers: Does Size of Organization Make a Difference?

Introduction

Job satisfaction should be an important issue in newsrooms – as in any work place. In our enlightened age, workers shouldn't be spending upwards of 40 hours a week doing work they consider unfulfilling and unenjoyable.

Past studies have shown that many factors have been found to predict job satisfaction in journalists, including perceived autonomy, perceived journalistic excellence, prestige of an organization and pay.[1] The size of an organization also may play a role in job satisfaction, especially considering that most journalists perceive more autonomy in smaller organizations, yet want to work for larger organizations because of increased pay and prestige.[2]

In their 1988 study of job satisfaction of daily newspaper journalists and organization size, Bergen and Weaver found that predictors of job satisfaction differ according to organizational size. Using new survey data, this paper attempts to replicate that study and offer comparisons of journalists a decade apart. This will further the understanding of how journalists' attitudes are changing. This paper also will examine the levels of journalists' job satisfaction at different-sized daily newspapers. Then it will look at what factors contribute to journalists' job satisfaction at different-sized dailies. And finally it will make recommendations for ways to help increase job satisfaction. It will do this in the context of other scholarly studies of job satisfaction in the world of journalism and elsewhere.

Definition

First, this paper will look at how job satisfaction has been defined. As Locke states, "To explain job satisfaction, and other psychological phenomena, the policy of correlation without explanation must be abandoned. The first question a scientific investigator must ask is not, 'How can I measure it?' but rather, 'What is it?' "[3]

Thousands of articles have been written on job satisfaction. Systematic research on job satisfaction dates back to the 1930s.[4] By 1969, more than 4,000 articles had been written on job attitudes, with the number of studies and articles expanding rapidly.[5] Because there are so many subtle dimensions to job satisfaction, measuring it isn't easy. While studies show that satisfied workers aren't necessarily more productive, job satisfaction is important nonetheless. As Hall says, "If work is the major activity of adult life for most people, then whether or not they are satisfied with what they are doing is important. People's well-being on the job is just as important as their well-being off the job."[6] Studies have shown that workers with low morale appear more susceptible to accidents, illness and heart disease. Job satisfaction seems to be a good predictor of general health and longevity.[7] Many managers believe job satisfaction can help enhance job performance.[8] And echoing Hall's comments, Rothman says, "The most obvious and immediate consequence of job dissatisfaction is that it makes the hours spent on the job very unpleasant."[9]

A number of definitions of job satisfaction have been used in a wide variety of disciplines and fields, including sociology, psychology, business and communication.

According to Locke:

> Job satisfaction is the pleasurable emotional state resulting from the appraisal of one's job as achieving or facilitating the achievement of one's job values. Job dissatisfaction is the unpleasurable emotional state resulting from the appraisal of one's job as frustrating or blocking the attainment of one's job values or as entailing disvalues. Job satisfaction and dissatisfaction are a function of the perceived relationship between what one wants from one's job and what one perceives it as offering or entailing.[10]

Researchers tend to agree that job satisfaction involves a person's feelings toward his or her work. Herzberg's Motivation-Hygiene Theory states that intrinsic job factors such as achievement, responsibility and chance for advancement contribute to job satisfaction while extrinsic factors such as company policy, supervision, salary and working conditions contribute to job dissatisfaction. This theory comes from the belief that humans have two sets of needs – an animal need to avoid pain and a human need to grow psychologically.[11] The extrinsic factors lead to job dissatisfaction because of the need to avoid unpleasantness, while the intrinsic factors lead to job satisfaction because of the need for growth or self-actualization. "At the psychological level, the two dimensions of job attitudes reflected a two-dimensional need structure: one need system for the avoidance of unpleasantness and a parallel need system for personal growth."[12]

Turning to communication research, the idea of both intrinsic and extrinsic rewards is widely accepted. One definition says job satisfaction is an accounting of intrinsic and extrinsic rewards sought and received.[13] Another definition states that job satisfaction is an individual's attitude toward a job and the degree the job fulfills the individual's needs, expectations and desires.[14] Various studies have used Herzberg's theory to examine job satisfaction in journalists.[15]

Although job satisfaction has been defined in great detail in many previous studies, this paper uses an operational definition that is fairly simple because it is a secondary analysis.

Previous studies in journalism

To put the study into perspective, this paper now turns to what other researchers have determined about journalists and job satisfaction, looking first at findings about job satisfaction in general and then at findings related to organizational size. Weaver and Wilhoit found that the percentage of journalists who say they are very satisfied has dropped from 49 percent in 1971, to 40 percent in 1982, to 27.3 percent in 1992.[16] While they noted that a majority in 1992 are at least fairly satisfied, the overall decline of job satisfaction is considerable. They found that sources of satisfaction for all journalists include autonomy (25 percent say it's important), an intrinsic interest or challenge in their jobs (20 percent), salary (14 percent), management or co-workers (13 percent), ability to have an impact on community (13 percent) and job security, benefits and working conditions (5 percent each). Reasons for journalist dissatisfaction were management policies (50 percent), low salary (50 percent) and lack of promotion opportunities (20 percent).[17]

Shaver found that opportunity for advancement was most critical for job satisfaction, while salary was most critical for job dissatisfaction.[18] Barrett found that both intrinsic and extrinsic factors were crucial in overall job satisfaction for American newspaper women.[19] While these women generally expressed positive job attitudes, these were tempered by perceptions of inequities. Those who felt underpaid or frustrated in their attempts to advance professionally tended to be less satisfied with their jobs. Stamm and Underwood found that newsroom policy changes affect job satisfaction because of their perceived impact on the quality of the newspaper and on the balance between the business and journalism sides of the newspaper.[20] The philosophy of market-oriented journalism, particularly at the large chain newspapers, has hurt job satisfaction, they argued. Pollard found that Canadian newsworkers were more satisfied due to a combination of intrinsic factors, such as autonomy, authority and control of work, and extrinsic factors, such as job security and work.[21] Bramlett-Solomon found that black journalists were generally satisfied with their jobs, especially if they believed their organizations were doing a good job in informing the public and if they received positive feedback from those higher in the organization.[22]

Turning to studies that involve organization size, Samuelson found that journalists who worked for newspapers with greater than 50,000 circulation were significantly less satisfied in their formal relations with management and in satisfactions inherent in personal duties.[23] Johnstone also found a negative effect of organization's size on job satisfaction.[24] A journalist at a larger organization loses autonomy – tasks become more specialized and the control of editorial operations becomes more centralized – resulting in lower job satisfaction.

Thus, organization size appears to play a major role in job satisfaction. Subsequently, size also will guide this research. Job satisfaction is likely to differ according to size of the organization. Predictors of job satisfaction also are likely to differ across papers of various sizes. As in the cited studies, job satisfaction will be treated as a dependent variable. Two main research questions will be addressed:

1) Is job satisfaction related to editorial staff size?

2) Do job satisfaction predictors vary according to the size of the editorial staff?

Methods

This analysis uses data from a 1992 survey in an attempt to replicate a study by Bergen and Weaver using 1982 survey data.[25] It is a secondary analysis of data collected on 1,156 U.S. journalists working at daily and weekly newspapers, radio and television stations, and news services and magazines throughout the United States.[26] The survey was conducted from June to September of 1992. The previous survey of 1,001 U.S. journalists was conducted between December 1982 and February 1983.[27]

For the purposes of this study, only data on journalists who worked at daily newspapers was used. Hence, the 1992 sample consisted of 636 daily newspaper journalists. The 1982 sample consisted of 462 daily newspaper journalists. Also, one significant change was made in the analysis of data. In the 1988 study, Bergen and Weaver categorized the size of daily newspapers by circulation.[28] In this study, the sample was divided into three categories of total editorial employees: 0-50, 51-125, and 126 and above.[29]

The dependent variable, overall job satisfaction, was measured by the responses to the following question: " All things considered, how satisfied are you with your present job – would you say very satisfied, fairly satisfied, somewhat dissatisfied or very dissatisfied?" This is the same question in both data sets.

Thirteen independent variables or predictors of job satisfaction also were measured. These are the same variables used by Bergen and Weaver in their 1988 study. Their choices were based on job dimensions or characteristics suggested by previous studies. The variables are: 1) freedom to select stories, a 4-point scale; 2) freedom to decide which aspects of a story should be emphasized, 4-point scale; 3) frequency of getting an important subject covered, 3-point scale; 4) autonomy importance in rating a job, 3-point scale; 5) organization's editorial policies importance in rating a job, 3-point scale; 6) chance to develop a specialty in rating a job, 3-point scale; 7) reactions/comments frequency from people above you in organization, 4-point scale; 8) organization's performance in informing the public, 5-point scale; 9) pay importance in rating a job, 3-point scale; 10) income level, 15 intervals; 11) editorial employees belonging to a union, a dichotomous variable; 12) age; and 13) want to work in the media in the next five years, a dichotomous variable. The data was analyzed with multiple regression – a statistical technique that can examine the effect of several independent variables on a dependent variable.

Results

Is job satisfaction related to editorial staff size? For the entire 1992 sample, job satisfaction is not significantly correlated with editorial staff size.[30] The correlation coefficient was .042, p = n.s. Table 1 presents distributions for job satisfaction as measured at each editorial staff size level.

Turning to a comparison with the 1982 data, results of a correlation between job satisfaction and editorial staff size show there is a significant correlation of .124, with $p \leq .05$. Similarly, a crosstabulation after journalists were divided into three groups based on the editorial staff size of the newspaper they worked for also indicated a significant relationship.[31]

While not a linear relationship, the results show that journalists at large newspapers tended to be more satisfied. For instance, 92.2 percent of those at the largest newspapers indicated they were fairly or very satisfied, compared with 84.7 percent of those at the smallest papers and 76.5 percent of those at the medium-sized papers.

Do job satisfaction predictors vary according to the size of the editorial staff? While there were no significant differences in job satisfaction at different levels of editorial staff size in 1992, the multiple regression analyses show that predictors vary by staff size.[32] Table 2 includes the beta coefficients for all 13 independent variables.

The strongest predictor of job satisfaction across all organization staff sizes is how good a job of informing the public the journalists think their organization is doing. The beta coefficient was .244.

The second strongest predictor of job satisfaction across all categories is the frequency of journalists getting reactions or comments from their supervisors or people above them at work. It is a significant predictor for all three groups.

The third strongest predictor overall is journalists' intent on remaining in the news media in the next five years. This predictor, while the top predictor for both the smallest and the largest newspapers, is not significant for the medium-sized papers.

Other significant predictors overall are: age, which is significant at small and large papers but not medium-sized papers; the amount of freedom journalists have to select stories they work on, which is significant for large papers but not for small or medium-sized papers; how often journalists are able to get a subject covered that they believe is important, which is significant for medium-sized papers but not for small and large papers; and membership in a journalists' union, which is significant only for the small papers.

The analyses of the 1982 data – reported in Table 3 – again show that predictors vary by size of editorial staff.[33]

The strongest predictor of job satisfaction across all organization staff sizes is how good a job of informing the public the journalists think their organization is doing. The beta coefficient was .279. This predictor was significant, however, for only the small newspapers. The 1992 data also had this variable as the strongest predictor, but it was significant at all three levels of staff size.

The second strongest predictor of job satisfaction in the 1982 data is how often the journalists get comments from their supervisors or people above them at work. It is significant at small and large papers but not for medium-sized papers. The 1992 data also had this variable as the second strongest predictor, but it was significant for all three levels.

The third strongest predictor of job satisfaction in the 1982 data is age. Yet this was found to be significant for only the small newspapers. In the 1992 data, age was found to be significant at small and large papers but not medium-sized papers

Other significant predictors overall in the 1982 data include the importance of editorial policies in journalists' rating their jobs, which was significant at small and medium-sized newspapers but not at large newspapers. It also should be noted that the variable has a negative correlation with job satisfaction at both small and medium-sized newspapers, meaning the less important the editorial policies were in journalists' rating of their jobs, the higher the job satisfaction. Another significant predictor is the amount of freedom journalists feel they have in deciding which aspects of a story should be emphasized, which was significant only at large newspapers. Neither of those last two variables were significant predictors in the 1992 data.[34]

Before turning to the question of what do all these findings mean, one caution: All of the predictors of job satisfaction mentioned in this study together account for only one-sixth to one-fourth of the variation in job satisfaction levels of the newspaper journalists. That means there are likely other factors – not included in this study – that enter into job satisfaction.[35] Nevertheless, the findings do offer valuable insight into job satisfaction at daily newspapers.

Discussion

Journalists at newspapers of different sizes are satisfied with their jobs for mainly the same reasons, but there are a few differences. Overall, journalists who think their organization is doing a good job of informing the public are more satisfied. This may reflect the fact that journalists often have an idealistic vision of their chosen profession. They believe journalists have a sacred duty in this country to inform readers about the goings-on around them, to make sense of the world. When their newspaper does a good job of that, journalists are more satisfied. For journalists at medium-sized papers, this was the strongest predictor, but not at the small and large papers. For those journalists, the strongest predictor was their intention to stay in the news media. This predictor makes sense because those journalists who are committed to journalism are logically the ones who are most satisfied with their jobs. This may have a stronger impact at small and large newspapers because those journalists are at two different ends of the spectrum – those just starting out at small newspapers and ready to make a mark in journalism, and those who are at the top newspapers in the country, with much influence, prestige and money – all hard to give up. Both kinds of journalists will want to stay with journalism.

To sum up, here are the predictors of job satisfaction at newspapers of different sizes:

Small newspapers – These journalists want to stay working in the news media, they don't think pay is very important in rating a job, they think their organization is doing a good job informing the public, they often get reactions and comments on their work from people above them at the newspapers, they belong to a union and they're older.

Medium-sized newspapers – These journalists think their newspaper is doing a good job informing the public, they often get reactions and comments on their work from people above them at the newspapers, and they are able to get subjects covered that they think are important.

Large newspapers – These journalists want to stay working in the news media, they often get reactions and comments on their work from people above them at the newspapers, they have a lot of freedom in selecting the stories they work on, they're older, and they think their newspaper is doing a good job informing the public.

Other observations:

* Pay is not that big a factor in job satisfaction for journalists at small newspapers. Because small newspapers generally pay less than large newspapers, the most satisfied journalists accept this as a fact of life.

* Journalists like to get comments and reactions from their supervisors and others at work.

* Union membership is a factor for journalists at small newspapers. Union membership, particularly at smaller newspapers, may serve to protect the journalist from poor working conditions and unequitable situations.

* Older journalists tend to be more satisfied at the small and large newspapers. The older journalist at a small newspaper is likely to have chosen to stay at a small newspaper and isn't itching to get out. Older journalists at large newspapers have, in a sense, already proven themselves. Both probably are making more money than their younger peers in the newsroom.

* Journalists at medium-sized newspapers want to get subjects covered that they think are important. They are probably at the stage in their career where they think they know as much or more than the editors they are working for. Plus, they want to exert as much influence on their readers as possible, particularly because they are not at the large newspapers where the impact of anything they write is greater.

* Journalists at large newspapers want to have as much freedom as possible in selecting the stories they work on. These journalists believe they've paid their dues, and

are entitled to be able to spend their time on stories they want to cover.

So how do these findings from journalists surveyed in 1992 compare with the journalists surveyed in 1982?

The most satisfied journalists at small newspapers in 1992 continued to value doing a good job of informing the public and getting reactions and comments from those above them. They also again were older. But in 1992, they also want to stay working in the news media, they don't think pay is very important in rating a job, and they belong to a union. The importance of editorial policies of the paper in their rating of a job is no longer a predictor – negative or otherwise.

Journalists at medium-sized newspapers have an entirely new set of predictors of job satisfaction – how good a job of informing the public they think their paper is doing, how often they get reactions and comments from people above them and how often they are able to get a subject covered they think is important. In 1982, the predictors were how important it is to develop a specialty in how they rate a job, where they want to work in five years, income level, how important pay is in their rating of a job, not belonging to a union and thinking that editorial policies of their paper are less important in how they rate a job.

The most satisfied journalists at large newspapers in 1992 continued to get more reactions and comments on their work from people above them at the newspapers. New predictors in 1992 were how good a job they think their paper is doing in informing the public, the amount of freedom they have in selecting the stories they work on, their desire to stay in the media, and age. The 1982 predictor of how much freedom they have in deciding which aspects of a story should be emphasized is no longer significant.

Conclusions

First, some recommendations for future research in this area will be offered. While this study had an adequate measure of job satisfaction, the survey used was intended to measure a wide variety of variables, not just job satisfaction. Thus, the measure for job satisfaction was simple. Future research should have more refined questions for measuring job satisfaction – perhaps a series of questions measuring both intrinsic and extrinsic characteristics of job satisfaction. For instance, Barrett measured intrinsic, extrinsic and overall levels of job satisfaction of 239 "newspaperwomen" by using responses to questionnaire statements applying to specific intrinsic and extrinsic aspects of the job.[36] Several other communication studies also point to the value of asking a series of questions involving job satisfaction.[37] The same is true for studies outside of the field.[38] Another recommendation is the inclusion of open-ended questions. This will allow different and perhaps unexpected reasons for job satisfaction/dissatisfaction to surface. Also, the questions asked journalists should be relevant to their field. As Mueller and McCloskey state:

> Though occupational-specific scales have the disadvantage of limiting comparisons across occupations, they have the important advantage of better delineating the components most relevant to the satisfaction of a particular occupational group. Thus, occupation-specific scales which include items and subscales that are specifically tailored to the particular job can provide valuable information in terms of managerial decision making.[39]

Finally, here are some recommendations for daily newspaper publishers and editors to help ensure high levels of job satisfaction in the newsroom:

* Emphasize high quality reporting and investigation. Keep newsrooms adequately staffed. Devote major resources to the task of informing the public. As we've seen, public

service remains the best overall predictor of job satisfaction.

* Comment on your employees' work. Offer praise for a job well done as well as constructive criticism.

* Encourage those who want to stay in the newspaper by offering advancement opportunities and more incentives. Editors and publishers should look to hire people who seem to have a long-term commitment and then nourish that commitment.

* Give reporters freedom to choose stories that they want to work on – this is particularly important for those at large newspapers. Perhaps offer a form of newsroom sabbatical, where journalists can work on long-term projects at selected times.

* Listen to your employees' suggestions for stories – this is particularly important at medium-sized newspapers. Perhaps organize brainstorming sessions as a way to involve the staff in setting the newspaper's agenda.

The issue of job satisfaction is an important one. Newspaper publishers and editors should strive to ensure high levels of job satisfaction in their newsrooms. If employees are happier on the job, they will likely stay with a company longer. Experienced reporters who know the ins and outs of a community are a valuable resource in a newsroom. While complete job satisfaction may never be obtained, any small increase will make the newspaper a better place to work. That may not win any journalism awards, but job satisfaction serves as its own reward.

Notes

1. John W.C. Johnstone, Edward Slawski, and William Bowman, The News People, (Urbana: University of Illinois Press, 1976); and David H. Weaver and G. Cleveland Wilhoit, The American Journalist: A Portrait of U.S. News People and Their Work, (Bloomington: Indiana University Press, 1986).

2. Lori A. Bergen and David Weaver, "Job Satisfaction of Daily Newspaper Journalists and Organization Size," Newspaper Research Journal, 9:2 (Winter 1988) 1-13.

3. Edwin A. Locke, "What Is Job Satisfaction?" Organizational Behavior and Human Performance 4:4 (November 1969) 309-336.

4. Robert A. Rothman, Working: Sociological Perspectives (Englewood Cliffs: Prentice Hall, 1987) 231-240.

5. Locke, *op. cit.*

6. Richard H. Hall, Dimensions of Work (Beverly Hills: Sage, 1986) 92-99.

7. Rothman, *op. cit.*

8. George Goldsmith, "What Lexington Labs Really Needs Is a Doctor: An Organizational Psychologist or a Consultant with Expertise in the Field of Corporate Culture," Harvard Business Review 74:3 (May-June 1996) 34-36.

9. Rothman, *op. cit.*, p. 231.

10. Locke, *op. cit.*, p. 309.

11. Frederick Herzberg, Work and the Nature of Man (New York: World Publishing Co., 1966).

12. Herzberg, *op. cit.*, p. 75.

13. George Pollard, "Job Satisfaction Among Newsworkers: The Influence of Professionalism, Perceptions of Organizational Structure, and Social Attributes," Journalism and Mass Communication Quarterly 72:3 (Autumn 1995) 682-697.

14. Merrill Samuelson, "A Standardized Test to Measure Job Satisfaction in the Newsroom," Journalism Quarterly 39:3 (Summer 1962) 285-291.

15. Sharon Bramlett-Solomon, "Predictors of Job Satisfaction Among Black Journalists," Journalism Quarterly, 69:3 (Fall 1992) 703-712.

16. Weaver, David and G. Cleveland Wilhoit, The American Journalist in the 1990s: U.S. News People at the End of an Era (Mahwah, N.J.: Lawrence Erlbaum Associates, 1996).

17. Multiple responses were allowed, so totals can be more than 100 percent.

18. Harold C. Shaver, "Job Satisfaction and Dissatisfaction Among Journalism Graduates," Journalism Quarterly 55:1 (Spring 1978) 54-61 & 108.

19. Grace H. Barrett, "Job Satisfaction Among Newspaperwomen," Journalism Quarterly 61:3 (Autumn 1984) 593-599.

20. Keith Stamm and Doug Underwood, The Relationship of Job Satisfaction to Newsroom Policy Changes," Journalism Quarterly 70:3 (Autumn 1993) 528-541.

21. George Pollard, *op. cit.*

22. Bramlett-Solomon, *op. cit.*

23. Samuelson, *op. cit.*

24. Johnstone and Bowman, *op. cit.*

25. Bergen and Weaver, *op. cit.*

26. The journalists were chosen randomly from news organizations that were also selected at random from listings in various directories. The 45-minute interviews were conducted by telephone by trained interviewers at the Center for Survey Research at Indiana University's Bloomington campus.

27. Market Interviews, a subsidiary of Market Opinion Research in Detroit, conducted the telephone survey. A systematic random sample of lists of editorial employees from randomly selected news organizations was used for the survey.

28. The categories of circulation were 0 to 25,000; 25,000 to 100,000; and 100,000 to 250,000. Because of a change in the way the 1992 survey was recorded, journalists' names and their newspapers are not available as they were in the 1982 data. Therefore, circulation figures for the respondents' newspapers cannot be determined. But a question concerning editorial staff size is available in both the 1982 and 1992 data. Because Bergen and Weaver found that circulation size and number of editorial employees are strongly correlated (Pearson's r = .90), the measure should provide similar results.

29. These were determined by looking at the percentages in the 1992 data, and finding categories that approximated a third of the sample for each. The breakdowns were kept the same for the 1982 data, even though the percentages were much different. For instance, the first category (0-50) accounted for 56 percent of the sample. But this is the best decision for the sake of uniformity. Staff size also is the most appropriate way in this data

30. Collinearity diagnostics were performed on both the 1992 and 1982 data and no problems were found.

31. This result is different from what Bergen and Weaver found in their 1988 study utilizing circulation size. They found there was no significant difference. Whether this new finding is a result of using editorial staff size instead of newspaper circulation or whether it is a result of the application of poor categories for staff size (0-50, 51-125 and 126 and above) for this data set is unclear.

32. The level of significance is .10. This level is used because of the small number of cases in some categories and also to reduce the chance for Type II error.

33. The level of significance again was set at .10.

34. How closely did this study's 1982 results match the findings of Bergen-Weaver? The top three predictors were the same, and ranked in the same order. That supports the finding of Bergen and Weaver that editorial staff size and circulation are highly correlated. Nevertheless, Bergen and Weaver did find a weaker yet significant predictor – an individual's intent to remain in the media in the next five years – that did not show up in this new analysis of the 1982 data. But they did find that the importance of an organization's editorial policies was a significant negative predictor – as this new analysis showed. One predictor that this study found that was not significant in the Bergen-Weaver study was the amount of freedom journalists have in deciding which aspects of a story should be emphasized.

35. One additional caution is that multiple regression is probably not ideal to use in this analysis. Since job satisfaction is ranked on a four-item interval scale, it doesn't meet the assumption that regression analysis needs to have an interval level dependent variable. The justification for using it, however, is to replicate the Bergen-Weaver study as closely as possible.

36. Barrett, *op. cit.*

37. See Samuelson, *op. cit.*; Shaver, *op. cit.*; and Stamm and Underwood, *op. cit.*

38. See Philip Janson and Jack Martin, "Job Satisfaction and Age: A Test of Two Views," Social Forces 60:4 (June 1982) 1089-1102; Clifford J. Mottaz, "Age and Work Satisfaction," Work and Occupation 14:3 (August 1987) 387-409; Charles Mueller and Joanne McCloskey, "Nurses' Job Satisfaction: A Proposed Measure," Nursing Research 39:2 (March/April 1990) 113-117; and James Carlopio and Dianne Gardner, "Perceptions of Work and Workplace: Mediators of the Relationship Between Job Level and Employee Reactions," Journal of Occupational and Organizational Psychology 68 (December 1995) 321-326.

39. Mueller and McCloskey, *op. cit.*, p. 114.

Table 1: Distributions of Job Satisfaction by Editorial Staff Size

	1992		
Job Satisfaction	*0-50 (N=177)*	*51-125 (N=251)*	*>125 (N=205)*
Very dissatisfied	2.3%	3.2%	1.0%
Somewhat dissatisfied	20.3	21.5	16.1
Fairly satisfied	50.3	52.6	55.6
Very satisfied	27.1	22.7	27.3

	1982		
Job Satisfaction	*0-50 (N=261)*	*51-125 (N=123)*	*>125 (N=77)*
Very dissatisfied	0.8%	1.6%	0%
Somewhat dissatisfied	14.6	22.0	7.8
Fairly satisfied	48.3	35.0	41.6
Very satisfied	36.4	41.5	50.6

For 1992, $x^2 = 6.04$; d.f. = 6; p = n.s.
For 1982, $x^2 = 14.53$; d.f. = 6; $p \leq .05$

Table 2: Job Satisfaction Predictors by Editorial Staff Size (1992) (Using Standardized Regression Coefficients)

Predictor	*All Papers*	*0-50*	*51-125*	*>125*
How good a job informing the public do you think your news organization is doing?	.244	.195	.362	.166
How often do you get reactions/ comments on your work from people above you in your organization?	.180	.193	.199	.189
Where would you most like to be working in the next five years – in the media or somewhere else?	.125	.234	n.s.	.219
Age	.118	.165	n.s.	.182
How much freedom do you usually have in selecting the stories you work on?	.108	n.s.	n.s.	.186
How often are you able to get a subject you think is important covered?	.103	n.s.	.189	n.s.
Do editorial employees belong to a union?	.070	.174	n.s.	n.s.
How important is pay in how you rate a job in your field?	n.s.	-.202	n.s.	n.s.
How important are the editorial policies of the organization in how you rate a job in your field?	n.s.	n.s.	n.s.	n.s.
How important is chance to develop specialty in how you rate a job in your field?	n.s.	n.s.	n.s.	n.s.
Income level	n.s.	n.s.	n.s.	n.s.
How important is the amount of autonomy you have in how you rate a job in your field?	n.s.	n.s.	n.s.	n.s.
How much freedom do you have in deciding which aspects of a story should be emphasized?	n.s.	n.s.	n.s.	n.s.
Adjusted R^2	**.186**	**.178**	**.243**	**.173**

p<.10; simple correlation coefficients not presented

Table 3: Job Satisfaction Predictors by Editorial Staff Size (1982) (Using Standardized Regression Coefficients)

Predictor	*All Papers*	*0-50*	*51-125*	*>125*
How good a job informing the public do you think your news organization is doing?	.279	.318	n.s.	n.s.
How often do you get reactions/ comments on your work from people above you in your organization?	.192	.141	n.s.	.398
Age	.181	.262	n.s.	n.s.
How important are the editorial policies of the organization in how you rate a job in your field?	-.129	-.152	-.346	n.s.
How much freedom do you have in deciding which aspects of a story should be emphasized?	.100	n.s.	n.s.	.436
How important is chance to develop specialty in how you rate a job in your field?	n.s.	n.s.	.379	n.s.
Where would you most like to be working in the next five years – in the media or somewhere else?	n.s.	n.s.	.265	n.s.
Income level	n.s.	n.s.	.225	n.s.
How important is pay in how you rate a job in your field?	n.s.	n.s.	.223	n.s.
Do editorial employees belong to a union?	n.s.	n.s.	-.190	n.s.
How much freedom do you usually have in selecting the stories you work on?	n.s.	n.s.	n.s.	n.s.
How often are you able to get a subject you think is important covered?	n.s.	n.s.	n.s.	n.s.
How important is the amount of autonomy you have in how you rate a job in your field?	n.s.	n.s.	n.s.	n.s.
Adjusted R^2	**.268**	**.272**	**.355**	**.233**

$p<.10$; simple correlation coefficients not presented

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Network Affiliation Changes and Inheritance Effects

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by
Marianne Barrett, Ph.D.
Assistant Professor
and
Charles C. Brotherton
Graduate Student
Walter Cronkite School of
Journalism and Telecommunication
Box 1305
Arizona State University
Tempe, AZ 85287-1305
(602) 965-6612
email: marianne@asu.edu
email:cbrotherton@asu.edu

Network Affiliation Changes and Inheritance Effects
Abstract

The network affilation changes and the challenges to viewing behavior that they present offer a unique opportunity to examine whether the traditional factors thought to impact audience duplication continue to do so. This study uses Nielsen ratings data for February 1994, 1995 and 1996 from sixty markets across the United States to assess the effect of the affiliation changes on audience duplication. The study finds that lead-in ratings continue to be the most important determinant of inheritance.

INTRODUCTION

In May 1994, New World Communications Group, Inc. announced that it would switch the affiliation of its twelve television stations from one of the three traditional networks (ABC, CBS, NBC) to Fox. The move, unheard of in broadcasting, sent shock waves through the industry and resulted in affiliation changes in over thirty markets throughout the United States. The affiliation changes and the challenges to viewing behavior that they present offer a unique opportunity to examine whether the traditional factors thought to impact audience duplication continue to do so. This study uses Nielsen ratings data for February 1994, 1995, and 1996 from sixty markets across the United States to assess the effect of the affiliation changes on audience duplication.

LITERATURE REVIEW

Much of the literature related to network programming strategies has addressed inheritance effects, that is, the tendency of the audience for one television program to pass along its audience to an adjacent program. Studies have shown that inheritance is determined by a combination of factors: audience availability, program and adjacent-program type, and channel characteristics (e.g., Cooper, 1993; Davis & Walker, 1990; Goodhardt, Ehrenberg, & Collins, 1987; Tiedge & Ksobiech, 1988; Webster, 1985). Researchers have also found that inheritance effects are highest when viewer choices are limited (Goodhardt, Ehrenberg, & Collins, 1975; Webster, 1985). Finally, studies have indicated that certain program types, especially situation comedies, tend to produce higher inheritance effects than others (Davis & Walker, 1990, Walker, 1988).

Goodhardt et al. (1975) found that consecutive or near-consecutive programs on the same evening shared their audiences to an above-normal extent but that the audience inheritance did not extend to programs further apart. These British researchers estimated that audience duplication for adjacent programs on U.S. networks averaged about 60% (p. 91), and they attributed audience duplication to "channel loyalty" (p. 23), or the tendency of viewers to prefer one channel over another, rather than program-type loyalty. The researchers speculated that audience duplication was a result of viewers staying tuned due to inertia or a lack of viewing options or of viewers tuning in early to wait for the following program. In contrast, Headen, Klopmaker, & Rust (1979), in an effort to extend Goodhardt's theses to the U.S. television audience, found significant program-type loyalty. Headen et al. concluded that patterns of audience duplication in the U.S. were considerably more complex than in the U.K.

Similar to the findings of Headen et al., Webster (1985) found significant, though limited, support for program-type loyalty. In a study of Arbitron television diary data, he found that nearly three-quarters of the audience for one program also viewed the following program, a level of inheritance higher than that found by Goodhardt et al. and Headen et al. Like Headen, however, inheritance figures fluctuated depending on program type and on the number of choices available to viewers at any given time. Overall, Webster found that adjacent programs shared a high number of viewers because a high number of the same people tended to be available to watch and that the earlier programs' ratings tended to be powerful predictors of ratings for the following programs.

In addition to the factors discussed above, television programmers and academic researchers have long intuitively believed that there is a relationship between program content and viewer loyalty. However, the empirical evidence supporting that relationship has been mixed. Contrary to one might expect, Goodhardt et al. (1975) found no special duplication patterns for programs of any particular type but subsequently reported higher levels of repeat viewing for soap operas (Barwise, Ehrenberg & Goodhardt, 1982). In his study of television inheritance effects, Webster (1985 at 121) noted that most of the previous research suggested that inheritance effects were unaffected by program type and that those results were "both theoretically and intuitively troublesome." He found that program type did have a significant, although limited effect on audience-duplication patterns as programs of similar types had greater inheritance effects than programs of different types.

With respect to which program type inspires the most loyalty, again the results have been mixed. Sabavala & Morrison (1977) found that the correlation between repeat viewing of a program and average rating was much higher for situation comedies than for any other program type. This suggests that these programs not only do well but that their audiences watch consistently. While Headen, Klopmaker & Rust (1979) found that audiences for situation comedies were loyal, they were less loyal than those for serialized dramas. Using typical industry categorization schemes and academic research, Tiedge & Ksobiech (1986) developed a typology which placed programs in one of eleven categories. Using this typology, Walker (1988) found that situation comedies had substantially higher levels of inheritance effects than most other program types. Part of the reason for this is the way that situation comedies are scheduled. Unlike most other types of programs, half-hour situation comedies are routinely programmed in two-hour blocks, a strategy designed to maximize audience flow. Nonetheless, Walker's findings support the earlier work of Sabavala and Morrison and suggest that situation comedies should do a better job of maintaining their audiences than other program types.

In addition to examining entertainment programming, researchers have also investigated whether there are inheritance effects associated with news programming. Webster and Newton (1988) found a positive correlation between local news ratings and network news ratings, indicating that network news ratings were dependent upon local news ratings rather than the reverse. This confirmed an earlier study by Wakshlag, Agostino, Terry, Driscoll, and Ramsey (1983), which examined news programs on two networks that had changed affiliates within a market. Wakshlag et al. found that the network news audience flowed heavily from the local news audience and that viewers overwhelmingly remained loyal to their favorite local news program, an indication of channel loyalty, resulting in a drastic ratings shift for the two network newscasts. Boemer (1987), in an analysis of Arbitron ratings, found a striking correlation between network prime-time program ratings and late local news ratings as well as evidence of channel switching after network programming. Her results indicated both an inherited audience for local news and channel loyalty. In a more in-depth study of local news preferences, Lin (1992) discovered a positive correlation between network news ratings and local news ratings, a reversal of the findings of the Webster and Newton and Wakshlag et al. studies, but still reinforcing the overall importance of adjacent network and local news exposure.

In an effort to maximize ratings, programming strategies often involve the manipulation of program schedules in an attempt to find the optimum location for a particular series. While the strategy can often succeed, it can also backfire. One of the more commonly used scheduling strategies is "sandwiching", placing a new program between proven hits. Citing industry leaders' claims that this approach gives the new program the best chance to succeed, Tiedge and Ksobiech (1988) undertook to assess the merits of the strategy. They also sought to determine whether "audience flowthrough" -- the flow of viewers from one program to the next -- or "hammocking" -- the concept that viewers will be drawn to the new program by their desire to view the program that follows it -- was the more valid structural model (p. 377). The researchers hypothesized that, if the sandwiching theory is accurate, historical evidence should indicate that series with both a strong lead-in and lead-out were more successful than series without either one and that ratings were fairly constant for all three layers. Both of these hypotheses were supported by the results, which indicated that sandwiched programs with strong lead-ins and lead-outs had average shares ten points higher than those without. However, of the two models, audience flowthrough received greater support than hammocking, reinforcing the effectiveness of strong lead-in programming.

Technological developments throughout the 1980s and 1990s have eroded the network audience (e.g., Barwise, 1986; Cooper, 1996; Walker, 1988). Cable penetration and the diffusion of VCRs, computers, and remote control devices have forced network programmers to compete more fiercely for viewers' attention. Between 1982 and 1986, according to Barwise (1986), repeat viewing of prime-time series, the number of viewers who watched the same program at the same time in consecutive weeks, dropped to 40% in the United States, down nearly 20% in ten years (p. 13). Still, inheritance plays an important role in predicting the success of network programming, though its effects are somewhat diminished.

Webster and Wakshlag (1983) posited that structural factors, including the number of options available to viewers, should impact audience duplication. Webster (1985) and Barwise (1986) found this to be the case. Walker (1988), in a study of inheritance effects in this new environment, hypothesized that the increased number of entertainment choices coupled with increasing sales of remote-control televisions would lead to a reduction of inheritance effects. Rather surprisingly, he found that while inheritance effects decreased as cable, VCR, and remote control device penetrations increased between 1982 and 1985, there had been an increase in inheritance effects between 1979 and 1982. He speculated that the audience lost to technological innovation in the late 1970s left behind less-adventuresome viewers [those more inclined to stick with one channel], hence the increase in inheritance. As remote controls proliferated in the early 1980s, inheritance effects diminished as expected (Walker, 1988). Two years later, in an extension of Walker's original study, Davis and Walker (1990) confirmed the drop in inheritance effects from 1983 to 1985 but observed another puzzling increase between 1986 and 1988. This time the researchers hypothesized that the same less-adventuresome viewers went back to their familiar habits after the novelty of the television remote control wore off, or that network programming maneuvers, such as seamless transitions between shows, had been successful in retaining audiences (Davis & Walker, 1990).

Cooper (1993) integrated cable penetration into his examination of a new model of audience exposure which also included the more traditional factors of inheritance, channel characteristics, and media concentration in the market. Using the model to test each factor against a survey of ratings for 50 "stripped" syndicated programs [those scheduled at the same time Monday through Friday] Cooper found that lead-in and lead-out ratings were by far the most powerful predictor of a particular program's ratings performance. He noted that these lead-in and lead-out ratings "completely overwhelmed any other factor in the model" (p. 414). But such powerful inheritance effects may be short-lived. In 1996 Cooper addressed the difficulty of continuing to predict with certainty audience behavior between programs. In an age of multiple channels and choices, a variety of factors including the absence of predictable audience flow from one program to the next on the same channel, makes any noticeable inheritance effects difficult to identify. One could argue that the difficulty in continuing to predict audience behavior with any certainty would be exacerbated if a station were to switch its affiliation from one network to another. One could further argue that if those changes occurred in a wholesale fashion as they did in 1994-1995, predicting audience behavior would be even more problematic. If however, the factors that traditionally have been found to influence audience behavior continue to do so, even in this chaotic an environment, it would underscore the impact of these factors on program performance. To assess whether these factors continue to influence audience inheritance, Nielsen ratings data for February 1994, 1995, and 1996 were collected for sixty markets throughout the United States. The data were used to test the five hypotheses outlined below.

Webster (1985) found lead-in program ratings to be powerful predictors of ratings for the following program. This was reinforced by Cooper's (1996) finding that lead-in and lead-out ratings were the most powerful predictors of a particular program's rating performance. These findings suggest

> H_1: The ratings of a lead-in program will do a better job than any other variable in predicting ratings for an immediately adjacent program.

While the impact of the number of options available to viewers on inheritance effects has been mixed, researchers speculate that that impact will be negative. Hence

> H_2: The number of stations in a market will have a negative impact on ratings.

Intuition and Webster's (1985) finding that programs of similar types had greater inheritance effects than programs of different types results in

> H_3: Program type similarity will have a positive effect on the ratings for adjacent programs.

Implicit in any study of the effect of affiliation changes on program ratings is the belief that those changes will be negative.

> H_4: An affiliation change will negatively affect ratings.

Additionally, because the wave of affiliation changes that began in the spring of 1994 initially and arguably most drastically affected CBS, one would expect

H_5: Being a CBS affiliate will negatively affect ratings.

To be able to generalize the results of the study to all markets, those with and without affiliation changes were included. Because market size is based population and is directly related to such things as the number of stations, a stratified random sampling technique was used to select markets for inclusion in the study. The strata are those generally used by the industry to classify markets. Specifically, markets one through 25 were included in the top stratum, 26 through 50 in the second, 51 through 99 in the third, and 100+ in the fourth. Further, because there are an unequal number of markets in each stratum, proportional stratified random sampling was used. This resulted in seven markets selected from each of the top two strata, 14 from the third stratum and 32 from the fourth.[1] Two of the sixty markets drawn were Fairbanks and Anchorage, Alaska. Because there are not three network affiliates in these markets, stations are free to select programming from more than one network. In these two markets the programming selected is also scheduled in a manner that is inconsistent with markets in the rest of the country. As a result, these two markets were excluded from the study. Of the remaining fifty-eight markets, affiliation changes occurred in nine. This is roughly proportional to the incidence of markets with affiliation changes in the total population.[2]

Four-week average DMA household ratings for all primetime programming airing on ABC, CBS, or NBC were collected using Nielsen Station Indexes from February, 1994,

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[1] The sixty markets originally drawn are 1.) Markets 1-25: Chicago, San Francisco, Washington, DC, Atlanta, Houston, Seattle, St. Louis; 2.) Markets 26-50: Hartford/New Haven, San Diego, Oklahoma City, West Palm Beach, Providence/New Bedford, Greensboro/High Point, Louisville; 3.) Markets 51-99: Albany/Schnectady/Troy, Richmond/Petersburg/Charleston/Huntington (WV), Little Rock/Pine Bluff, Tulsa, Lexington (KY), Las Vegas, Chattanooga, Huntsville/Decatur (FL), Cedar Rapids/Waterville/Dubuque, South Bend/Elkhart, Columbia (SC), Davenport/Rock Island/Moline, Springfield/Holyoke; 4.) Markets 100+: Lincoln/Hastings/Kryplus, Savannah, Peoria/Bloomington, Lafayette (LA), Reno, Macon, Amarillo, Monroe/ElDorado, Wheeling/Steubenville, Wichita Falls/Lawton, Rochester/Mason City/Austin (MN), Columbia/Jefferson City, Bluefield/Beckley, Odessa/Midland, Lubbock, Bangor, Anchorage, Abilene/Sweetwater, Idaho Falls/Pocatello, Elmira, Billings, Yuma/El Centro, Lake Charles, Meridian, Lafayette (IN), Cheyenne/Scottsbluff, Ottumwa/Kirksville, Zanesville, Fairbanks, Victoria and Helena.

[2] There were affiliation changes in 34 U.S. markets. These markets represent about 16 percent of the 211 television markets. The nine markets included in the study in which affiliation changes occurred are: Atlanta, Seattle, St. Louis, Greensboro/High Point, North Carolina, South Bend, Indiana, Monroe, Louisiana, Idaho Falls, Yuma and Macon. These nine markets represent about 15.5 percent of the 58 markets included in the study.

February, 1995, and February, 1996, the "before," "during," and "after" of the affiliation changes for each of the markets chosen . Programming airing on the Fox network was not included because Fox does not distribute a full primetime schedule to its affiliates. Additionally, because it was the decision of New World to switch the affiliations of its stations from one of the three traditional networks (ABC, CBS or NBC) to Fox that started the change reaction in affiliation switches, the focus of the study is the effects of those changes on the performance of the traditional networks' primetime programming. February was selected because it is one of the three times during the year that Nielsen collects data for all television markets. Additionally, it is the month in which the highest level of viewership occurs. Only programs which were scheduled in all three seasons were included in the study. On the basis of previous research and to test the hypotheses outlined above, data for each of the three years were collected on the following variables:

Lead-in rating--the multi-week DMA household rating for the program immediately preceding the program of interest.

Lead-in program--the title of the program immediately preceding the program of interest.

Program type similarity--a dummy variable to indicate whether the adjacent programs were the same type. A 1 indicated program type similarity, a 0 indicated program type dissimilarity.

Number of stations--the number of broadcast stations licensed to a specific market as listed by A.C. Nielsen in the front of each local market rating book, a measure of the number of options available to viewers..

Type of program--one of eleven genres of program as specified by A. C. Nielsen.

Station rank in the market--an individual station's standing in its market based on its 6 a.m.-2 a.m. DMA household rating Sunday through Saturday.

Cable--the percentage of television households in a market which subscribe to a cable television service, a proxy measure of the number of options available to viewers.

Program length--the length of a program, 30, 60, 90 or more than 90 minutes.

Affiliation change--a dummy variable to indicate whether a station changed affiliation from one network to another. A 1 meant that an affiliation change occurred, a 0 meant that no change took place.

Net V to U--a dummy variable to indicate whether an affiliation change resulted in a network moving from a VHF station to a UHF station. A 1 meant the change occurred, a 0 meant that no change took place.

CBS--a dummy variable to indicate whether a station was a CBS affiliate in 1994. A 1 meant that the station was a CBS affiliate, a 0 meant that it was not.

Correlational analysis was used to determine if there is a relationship between a program's rating and the variables outlined above. OLS multiple regression for each of the three years, was then used to assess the influence of those variables on household ratings. Further, if a lead-in program's rating is thought to be the best predictor of inheritance, then it is likely that a program's own performance in a previous season will also be a good predictor of its ratings in the current season. To determine if this were the case, for 1995 and 1996, a variable for a program's rating in the previous season was created and included in the models. Data on a program's performance in the previous year was not available for 1994 and is therefore excluded from that model. The unit of analysis was the individual program. Because of scheduling variations one year to the next, the number of cases included in the analysis varies (1994 n=624; 1995 n=680; 1996 n=633).

Preliminary regression models indicated that cable penetration, whether an affiliation change resulted in a network moving from a VHF to a UHF station, and program length were not statistically significant variables and as a result, were excluded from subsequent models. The complete multiple regression models, including all remaining variables, for each of the three years are presented below (Table 1, Table 2 and Table 3).[3]

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[3] Program type similarity was also excluded from the multiple regression models because of an insufficient number of cases for these models. However, because of the importance of this variable in previous research, simple regression models were run to asses the impact of program type similarity on program ratings. The results of these latter models are discussed below.

Table 1
1994 Household Rating
Multiple Regression

Variable	B	SE B	Beta	T	Sig T
94 Lead-In Rtg.	.722477	.028126	.740254	25.687	.0000
Doc./News	6.757712	.624855	.415133	10.815	.0000
General Drama	na	na	na	na	na
Sit Com	2.100891	.481241	.164267	4.366	.0000
Number of Stations	-.161109	-.046614	-.903379	-3.456	.0000
Station's Rank in the Market	-.519517	.166904	-.093779	-3.113	.0019
CBS	1.539793	.499424	.087975	3.083	.0021
Affiliation Change	-.235187	.4330550	-.014205	-.546	.5831
Constant	1.465114	.808809		1.811	.0706

Multiple R	.78988
R Square	.62391
Adjusted R Square	.61925
Standard Error	2.93955

Table 2
1995 Household Rating
Multiple Regression

Variable	B	SE B	Beta	T	Sig T
95 Lead-In Rtg.	..437363	.25767	.499292	16.973	.0000
94 HH Rtg.	.391332	.028233	.439818	13.861	.0000
Doc./News	4.367020	.446536	.66959	9.780	.0000
General Drama	1.084834	.398062	.038063	2.725	.0066
Sit Com	.593329	.241754	.064603	2.454	.0144
Number of Stations	.075013	.035767	.044653	2.097	.0364
Station's Rank in the Market	-.140788	.11159	-.029338	-1.267	.2058
CBS	-.243604	.269270	-.022591	-.905	.3660
Affiliation Change	.135477	.385538	.077657	.351	.7254
Constant	1.237201	.556010		2.225	..0264

Multiple R	.85012
R Square	.72271
Adjusted R Square	.71870
Standard Error	2.36324

Table 3
1996 Household Rating
Multiple Regression

Variable	B	SE B	Beta	T	Sig T
95 HH Rtg.	.450374	.021561	.532269	20.888	.0000
96 Lead-In Rtg.	.425993	.032199	.376298	13.230	.0000
Doc./News	.996276	.390531	.105866	2.551	.0110
General Drama	-1.551758	.425756	-.143504	-3.645	.0003
Sit Com	-1.604203	.350900	-.197042	-4.572	.0000
Number of Stations	.011110	.035060	.007274	.317	.7514
Station's Rank in the Market	-.077227	.106944	-.019901	-.722	.4705
CBS	-1.553510	.301284	-.141497	-5.156	.0000
Affiliation Change	-1.292801	.378913	-.081187	-3.412	.0007
Constant	2.463884	.612655		4.022	.0001

Multiple R	.82418
R Square	.67927
Adjusted R Square	.67458
Standard Error	2.32396

To compare the relative impact of individual variables on household ratings, simple regression models were run for each of these variable for each of the three years. The adjusted R^2 for each of these simple regression models provides an indication of the variable's influence on ratings.

RESULTS

In their seminal work on audience duplication, Goodhardt et al. (1975) found that consecutive or near-consecutive programs on the same evening shared their audiences to an above-normal extent but that the audience inheritance did not extend to programs further apart. Subsequently researchers have found support for the relationship between the ratings of one program and that of its lead-in. For example, of the two models tested by Tiedge and Ksobiech

(1988), the audience flowthrough model received the greater support. Additionally, in his 1993 study, Cooper found that lead-in and lead-out ratings were by far the most powerful predictors of a particular program's performance. Although lead-out ratings were not considered in the current study, the results confirm the findings of Cooper, Goodhardt et al., and Tiedge and Ksobiech and support H_1: The ratings of a lead-in program will do a better job than any other variable in predicting ratings for an immediately adjacent program.

Specifically, the correlation between a program's rating and that of its lead-in is statistically significant in each of the three years (1994 r=.7172 p<.000; 1995 r=.6982 p<.000; 1996 r=.5443 p<.000). More importantly, a lead-in program's rating was significant in each of the three multiple regression models. (Table 1, Table 2 and Table 3). Further, on its own, lead-in rating explains 51 percent of the variation in household ratings in 1994; 48 percent in 1995 and 29 percent in 1996 (Table 4, Table 5 and Table 6). This is particularly striking when one considers that the multiple regression models explain about 62 percent of the variation in household ratings in 1994; 72 percent in 1995 and 67 percent in 1996.

Table 4
1994 Adjusted R^2 for Simple Regression Models

Variable	Adjusted R^2	Standard Error
Full Model	.61925	2.93955
Lead-in Program Rating	.51360	3.43967
Previous Year's Rating	na	na
Number of Stations	.00100	5.17348
Program Type Similarity	.06306	5.18790
Doc/News	.04921	5.04710
General Drama	.00404	5.16561
Sit Coms	.00059	5.17454
CBS	na	na
Affiliation Change	na	na

Table 5
1995 Adjusted R^2 for Simple Regression Models

Variable	Adjusted R^2	Standard Error
Full Model	.71870	2.36324
Lead-in Program Rating	.48672	3.25976
Previous Year's Rating	.45583	3.66717
Number of Stations	-.00054	5.04033
Program Type Similarity	.00181	4.55685
Doc/News	.00733	5.02048
General Drama	.01932	4.99005
Sit Coms	.01138	5.01022
CBS	.00905	5.01611
Affiliation Change	.00425	5.03741

Table 6
1996 Adjusted R^2 for Simple Regression Models

Variable	Adjusted R^2	Standard Error
Full Model	.67458	2.32396
Lead-in Program Rating	.29519	3.41014
Previous Year's Rating	.47927	3.37827
Number of Stations	-.00051	4.66958
Program Type Similarity	.01296	4.02960
Doc/News	.02911	4.59994
General Drama	.01385	4.63595
Sit Coms	.00111	4.66579
CBS	.00598	4.65442
Affiliation Change	.02672	4.60560

As noted above, if a lead-in program's rating is a key variable in predicting ratings for an immediately adjacent one, then it is likely that a program's own performance in a previous season should also be a good predictor of its ratings in the current season. Both the multiple and simple regression models support this belief. In the 1995 and 1996 multiple regression models, the previous year's rating is a significant variable (Table 2 and Table 3). The results of simple regression indicate that in 1995, a program's 1994 rating explains almost 46 percent of the variation in ratings (Table 5). In 1996, a program's 1995 rating explains approximately 48 percent of the variation (Table 6). Because data on 1993 ratings were not collected for this study, the impact of a program's performance in that year on its 1994 performance is unknown. However, based on the results of the 1995 and 1996 models, it is reasonable to speculate that a program's rating in 1993 would have a significant impact on its 1994 rating.

Because lead-in rating and previous season's rating have the impact that they do and because it is likely that together they will have an even stronger impact, multiple regression models for 1995 and 1996 were developed using both of these indicators. The results of the two models lend support to this expectation. In 1995, previous season's rating coupled with lead-in rating explains almost 70 percent of the variation in household ratings (Table 7) as compared with the 49 percent explained by lead-in rating alone; the 45 percent explained by previous season's rating alone; and the 72 percent explained by the full model. The 1996 model yields a comparable result (Table 8). Lead-in rating coupled with 1995 rating explains 59 percent of the variation in ratings as compared with the 29 percent explained by lead-in rating alone; the 48 percent explained by 95 rating alone; and the 67 percent explained by the full model.

Table 7
1995 Adjusted R^2 for
Lead-in/Previous Season Rating Model

Variable	Adjusted R^2	Standard Error
Lead-in Program Rating and Previous Year's Rating	.66697	2.57372
Full Model	.71870	2.36324
Lead-in Program Rating	.48672	3.25976
Previous Year's Rating	.45583	3.66717

Table 8
1996 Adjusted R^2 for
Lead-in/Previous Season Rating Model

Variable	Adjusted R^2	Standard Error
Lead-in Program Rating and Previous Year's Rating	.59186	2.60263
Full Model	.67458	2.32396
Lead-in Program Rating	.29519	3.41014
Previous Year's Rating	.47927	3.37827

As noted earlier, Webster and Wakshlag (1983) posited that structural factors, including the number of options available to viewers, should also impact audience duplication. Webster (1985) and Barwise (1986) found this to be the case. Subsequently, both Walker (1988) and Davis and Walker (1990) found that the number of options had a rather complicated effect on inheritance. The immediate effect of technological change was a decrease in duplication with the effect appearing to wear off after a while. The results of the current study are similar. In the first two multiple regression models, number of stations is a significant predictor of ratings performance. (Table 1 and Table 2). By 1996, however, number of stations is no longer a significant factor in the model (Table 3). When run as simple regression models, the number of stations in a market explains one percent or less of the variation in household ratings in any of the three years (Table 4, Table 5 and Table 6). This suggests that in the mature, multichannel environment of the mid-1990s, the number of options essentially has no impact on ratings which leads us to reject H_2: The number of stations in a market will have a negative impact on ratings.

While this seems counterintuitive, as Walker (1988) and Davis and Walker (1990) speculated, perhaps, when faced with change, viewers experiment and try new channels but, after the novelty wears off, revert to what is tried and true. An alternate explanation in the case of the affiliation changes, which in some ways mirror the technological changes addressed by previous researchers, is that it took awhile for viewers to find their favorite programs. But, once the audience found its favorites, a new viewing equilibrium was reached.

As noted above, in his study of television inheritance effects, Webster (1985) stated the suggestion that inheritance effects were unaffected by program type was "both theoretically and intuitively troublesome" (p. 121). He found that program type did have a significant, although limited, effect on audience-duplication patterns as programs of similar types had greater inheritance effects than programs of different types. In the present study, although there is a significant but moderate correlation between lead-in rating and program-type similarity in 1994 (r=.1706, p<.000), the correlation is negative in 1995 (r=-.1442, p<.000) and not significant in 1996 (r=.0438, p=.275). Further, because preliminary results indicated that program type similarity did not have a statistically significant effect on program ratings, it was eliminated from subsequent multiple regression models. When entered in simple regression models, program type similarity explained six percent of the variation in household ratings in 1994, less that one percent in 1995 and about one percent in 1996. Although at first glance this finding seems counterintuitive and rather perplexing, when once considers the scheduling practices of the broadcast networks the results begin to make sense. Situation comedies, which are usually a half-hour in length, are the only types of programs that are placed back-to-back in a single evening. All other genres of programs are scheduled on a more or less standalone basis. So, except for sitcoms, program type similarity between adjacent programs is virtually non-existent and therefore a poor barometer of likely inheritance.

With respect to the relationship between specific program types and audience duplication, researchers have had some trouble establishing whether viewers of one type of program are more loyal than viewers of another. However, some researchers (Headen et al., 1979; Sabavala & Morrison, 1977; and Walker, 1988) have found that audiences for situation comedies are loyal. As a result, one would expect that situation comedies would be useful predictors of ratings performance. In the current study, each program was identified by type based on the classification scheme used by A.C. Nielsen. Of the eleven categories used here, several included two programs or less, and were eliminated from further analysis. Three program types remained and were included in both the single and multiple regression models. They are situation comedies, documentary news, and general dramas. The results of both simple and multiple regression analysis are quite mixed. For example, in the 1994 multiple regression model, documentary news programs and situation comedies are statistically significant variables while general drama programs are not included at all because there is an insufficient number of them in this particular year (Table 1). In both the 1995 and 1996 multiple regression models, all three program types are significant predictors of ratings (Table 2 and Table 3). When run as simple regression models, documentary news programs explain more variance in ratings than either general dramas or situation comedies in 1994 and 1996 (Table 4 and Table 6) while general dramas explain more variance in 1995 (Table 5). However, at best documentary news programs explain only slightly less than three percent of the variation in ratings which suggests that the utility of classifying programs by genre and then using those classifications to predict ratings is marginal at best. Perhaps the problem lies in the classification schemes. If there were sub-categories of situation comedies, for example, the results might be different. Alternately, because a show had to be on the air all three seasons to be included in this study, a number of programs were excluded from the analysis and those included were predominately situation comedies. It is quite likely that a different result would occur if inheritance effects were examined for a single year or if there was a better mix of program types in all three years.

Finally, implicit in any study of the effect of affiliation changes on program ratings is the belief that those changes will have some effect and that the effect will be negative. H_4: An affiliation change will negatively affect ratings.

Additionally, because the wave of affiliation changes that began in the spring of 1994 initially and arguably most drastically affected CBS, a fifth hypothesis was tested. H_5: Being a CBS affiliate will negatively affect ratings. Since the affiliation changes occurred subsequent to February, 1994, only the 1995 and 1996 regression models include these variables. In the 1995 multiple regression model (Table 2), neither an affiliation change nor being a CBS affiliate was a significant predictor of ratings. In 1996, however, both were significant. When run as simple regression models, an affiliation change explained slightly more variation in ratings in both years (Table 5 and Table 6) than did being a CBS affiliate. But, at best an affiliation change explained less than three percent of the variation in household ratings, suggesting that it too, is not an especially useful variable when trying to predict ratings but is more helpful than number of stations or program type similarity. While there is some support for the hypothesis, an affiliation change will negatively affect ratings, the support is rather marginal. If there is anything to be gleaned from the use of affiliation change as a variable, at least in this study, it is that it took some time for the effects of those changes to be felt. This corresponds somewhat with what Walker (1988) and Davis and Walker (1990) found in their studies of inheritance. Simply put, when confronted with change, the audience takes a while to adjust its viewing behavior.

DISCUSSION

The subject of audience duplication has been of interest to both industry practitioners and academic researchers since the early 1970s. In particular, both have sought to assess the factors that influence duplication and ascertain which of those factors are the most useful in predicting ratings. Beginning with Goodhardt et al. (1975) researchers (e.g. Cooper, 1993; Tiedge & Ksobiech, 1988; and Webster, 1985) have found that the performance of a program's lead-in is the best indicator of the performance of the following program. The current study essentially supports this. However, the program's own performance in the previous season appears to be a comparable indicator. More importantly, when considered together, the lead-in's rating and the program's previous season performance explain almost as much of the variation in ratings as a model with seven additional variables. What is perplexing, however is why the impact of the lead-in program rating in the 1996 model is noticeably less than its impact in the 1995 or 1996 models. One explanation for this seeming inconsistency is that the lead-in program ratings might have been relatively low and as a result, the adjacent program would less audience to inherit. Alternately, there may be extraneous variables that interact with the lead-in ratings in such a way as to lessen their impact. Further research, might identify and quantify some of these extraneous variables and assess their influence on ratings.

What is perhaps the most telling of this study's findings is the lack of influence of program type similarity, number of stations or affiliation change on program ratings. Wit respect to program type similarity, one explanation for the current study's results is the fact that even though two similar types of programs are scheduled adjacently, the individual programs may be very different from one another. One only needs to consider programs such as *Home Improvement* and *Friends*, two situation comedies, to recognize that there is at least some degree of variation within a program category.

Regarding, the lack of influence of number of options available to viewers on ratings, while Webster (1985) found that the number of options available to viewers had an impact on inheritance, Walker (1988) and Davis and Walker (1990) found that the impact lessened with time. In the current study, the number of stations in a market may have had so little an effect because even though viewers have a plethora of choices, after an initial period of experimentation they revert to what they know. This might also explain why the affiliation changes had so little impact on ratings. When the affiliation changes of 1994-1995 began, they created a hubbub among broadcasters, industry observers and some academic researchers. But apparently, the audience was unfazed. In a complex, multichannel environment with remote control devices, it doesn't seem to matter how may options there are or where the audience's favorite programs go. As long as those programs remain on the air, viewers will find them. What does seem to matter is the rating of a program's lead-in and its own performance in the past.

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A Profile of Potential High-Definition Television Adopters in the United States

Michel Dupagne
School of Communication
University of Miami
P.O. Box 248127
Coral Gables, FL 33124-2030
Phone: (305) 284-3500
Fax: (305) 284-3648
E-mail: dupagnem@miami.edu

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Abstract

A telephone survey was conducted with 193 adults in a major U.S. metropolitan area to assess consumer predispositions toward high-definition television (HDTV) and profile potential adopters of this technology according to demographics, mass media use, ownership of home entertainment products, and importance of television attributes. Based on diffusion theory and communication technology adoption studies, this study hypothesized that male, younger, better educated, and higher-income respondents who are more frequently exposed to mass media channels and value television features more highly would be more aware of HDTV, express a greater interest in HDTV, and be more likely to purchase an HDTV set. Correlational analyses indicated that HDTV awareness was positively related to education, income, gender (male), newspaper use, ownership of home entertainment products, and picture sharpness; HDTV interest was negatively related to age and positively related to income, gender (male), moviegoing, ownership of home entertainment products, and picture sharpness; and HDTV purchase intention was positively related to screen size. Hierarchical regression analyses were also run to determine the relative importance of demographics, mass media use, ownership of home entertainment products, and television attributes in predicting HDTV awareness, interest, and purchase intention.

A Profile of Potential High-Definition Television Adopters in the United States

On April 3, 1997, after 11 long, and often contentious, years (see Brinkley, 1997), the Federal Communications Commission (FCC) concluded its proceedings on digital television (DTV). First, on December 24, 1996, the Commission adopted a standard for terrestrial DTV that will enable broadcasters to transmit programs in high-definition television (HDTV) or standard-definition television (SDTV) format (Federal Communications Commission [FCC], 1996). Digital HDTV will offer significantly better pictures than SDTV, which is essentially a digital version of the existing NTSC television system, because it will use the entire 6 Mhz bandwidth to deliver the signal. It will provide three main technical improvements over NTSC: (1) higher-picture resolution (1080 active lines versus NTSC's 525 scanning lines) approaching 35 mm picture quality; (2) a wider aspect ratio (16:9 versus NTSC's 4:3) approximating the movie theater experience; and (3) distortion-free multichannel audio (digital 5.1 channel system versus NTSC's analog stereophony) comparable to the sound quality of a compact disc (see Seel, 1996).

Then on April 3, 1997, the Commission finalized the two remaining advanced television (ATV) rulemakings--general service rules and channel assignments. In the Fifth Report and Order, the Commission completely reshuffled the NTSC-to-HDTV transition schedule it had adopted in September 1992. It required that (1) the affiliates of ABC, CBS, Fox, and NBC in the top 10 markets (30% of TV households) build their DTV facilities by May 1999 and those in the top 30 markets (53% of TV households) by November 1999; (2) all remaining commercial stations construct their DTV facilities by May 2002; (3) all noncommercial stations construct their DTV facilities by May 2003; and (4) DTV licensees simulcast 50% of their analog video programming on the DTV channel by April 2003, 75% by April 2004, and 100% by April 2005. It also shortened the duration of the transition period from 15 to 10 years by setting the target date for the phase-out of NTSC service in 2006. More surprisingly, and contrary to previous actions, the FCC declined to mandate broadcasters to air a minimum amount of HDTV programming and, instead, left this decision to the discretion of the licensees (FCC, 1997a).

In the Sixth Report and Order, the FCC adopted a Table of Allotments for digital television based on use of channels 2-51. Responding to comments, it added channels 2-6 to channels 7-51, which was originally proposed as the DTV core spectrum in the Sixth Further Notice of Proposed Rule Making of July 1996, to determine DTV channel assignments. Upon acceptability of the lower VHF channels 2-6 for DTV use, the Commission might ultimately shift the core spectrum from channels 7-51 to channels 2-46. According to the Table, over 93% of broadcasters would receive a DTV allotment that reaches at least 95% of their existing NTSC service area (FCC, 1997b).

With the completion of these proceedings, the HDTV debate is now shifting in earnest from technology standardization and spectrum allocation to economic considerations, primarily programming and station conversion. Since the early 1990s, some U.S. broadcasters have expressed concerns, if not outright anger, at the cost of converting their facilities from NTSC to HDTV, especially within the FCC-prescribed transition window. Vocal comments, such as "HDTV will bankrupt stations" (McConnell, 1995, p. 103), were not uncommon a few years ago, though now many broadcasters have resigned themselves to accept the inevitability of HDTV by political and competitive necessity. On February 2, 1997, NBC, in cooperation with its owned-and-operated WRC-TV, became the first U.S. broadcast television network to transmit live a program (Meet the Press) in HDTV format. As of June 1997, seven stations were broadcasting experimental HDTV programs: WRAL-HD, Raleigh, NC; WRC-HD, Washington, DC; KOMO-HD, Seattle, WA; and KCTS-HD, Seattle, WA; KOPB-HD, Portland, OR; WETA-HD, Washington, DC; WCBS-HD, New York, NY. Conversion costs will depend heavily on station size and are difficult to estimate, but are likely to range from $1 million or less for pass-through equipment (i.e., to retransmit the network signal) to $10 million or more for complete local production facilities (McConnell, 1997).

Surprisingly, amidst all these preparations, one key factor remains overlooked: the consumer (or demand) side. First HDTV sets are slated to hit the stores by Christmas 1998 at a price ranging from $5,000 to $11,000 (Dickson, 1997; "Zenith's First Digital Sets," 1997). Broadcasters and consumer electronics manufacturers have high expectations, but are American consumers ready for HDTV? How will they react to it? How aware of and interested are they in HDTV receivers? How will price influence the adoption of HDTV receivers and associated hardware? Early U.S. empirical studies, conducted in the late 1980s and reviewed below, reveal lukewarm consumer reactions to HDTV instead of unreserved responses that one would normally expect from a product that has been heralded as revolutionary and unique.

The purpose of this paper is to revisit the consumer issue by assessing HDTV awareness, interest, and purchase intention in a major U.S. metropolitan area and identifying the characteristics of potential HDTV adopters based on demographics, mass media use, ownership of home entertainment products, and the importance of television attributes. Because previous studies were undertaken in the late 1980s, and now that HDTV is just around the corner, it seems particularly timely to reassess U.S. consumers' predispositions toward the technology.

This study also offers theoretical insights, because, unlike past research, it is grounded in the diffusion of innovations literature. We would expect potential HDTV adopters to exhibit characteristics similar to those of earlier product adopters. Furthermore, it advances our understanding of diffusion theory by investigating the relative importance of demographics, mass media use, ownership of home entertainment products, and television attributes in explaining pre-adoption of a communication technology. Before detailing the hypotheses and the methodology, the paper will review three early HDTV consumer studies and summarize the main elements of diffusion theory.

Early HDTV Consumer Studies in the United States

Overall early consumer studies point to somewhat lukewarm predispositions toward HDTV and its technical improvements. John Abel, former Executive Vice President of the National Association of Broadcasters, went so far as declaring to a group of broadcasters that "You don't want HDTV. And consumers say they don't want it, either" (Andrews & Brinkley, 1995, p. 6). But in fact, consumer reactions are far from being negative except in the Home Box Office study.

Neuman (1988) found that, when exposed to NTSC and HDTV material side by side (dual stimulus test), 62% of the participants preferred HDTV. With the exception of age, viewers did not differ on the basis of demographics, television use, or evaluations of picture characteristics (color, screen shape, picture sharpness, picture brightness, sense of depth, and motion quality). The author also reported that only 6% of the subjects assigned to the HDTV condition (single stimulus test) were willing to pay $500 on top of the price of their current television set for an HDTV receiver.

Another study, conducted in Seattle, Washington, suggests more enthusiastic viewer responses to HDTV (Lupker, Allen, & Hearty, 1988). In side-by-side viewing, in which programming material was displayed alternatively, 73% of the respondents reported that HDTV was better than NTSC in overall picture quality. Respondents also preferred the HDTV set in terms of sense of depth (78%), screen shape (74%), picture sharpness (72%), color quality (69%), picture brightness (60%), and motion quality (57%). Of the respondents, only 14% and 18% indicated that they definitely or probably would buy an HDTV set like the one they were shown for $2,500 and $1,500, respectively.

Home Box Office (1988) conducted the third study in Danbury, Connecticut, and found that only 39% of the respondents felt that HDTV was better than NTSC in overall picture quality. Respondents' preference for HDTV was also low in regard to screen shape (46%), color quality (43%), sense of depth (43%), picture sharpness (41%), picture brightness (41%), and motion quality (36%). But 17% and 23% of the respondents reported they definitely or probably would buy an HDTV set like the one they were shown within the next two years if available at $2,500 and $1,500, respectively.

Diffusion Theory

Rogers (1995) defines "diffusion" as "the process by which an innovation is communicated through certain channels over time among the members of a social system [emphases added]" (p. 5).

The first element of this definition presupposes the existence of an innovation, which refers to an idea that is perceived as new by an individual. People evaluate an innovation in terms of six main attributes: relative advantage, compatibility, complexity, trialability, observability, and perceived risk. The sixth construct is not part of Rogers' set of perceived innovation attributes and was originally conceptualized by Raymond Bauer (see Ostlund, 1974). Rogers (1995) reports that his five attributes explain 49-87% of the variance in rate of adoption. Consistent with previous research, Holak and Lehmann (1990) found that compatibility (.558) and relative advantage (.455) were the perceived innovation characteristics most highly correlated with purchase intention of entertainment items (e.g., consumer electronics products), followed by perceived risk (-.160), communicability (i.e., observability) (.158), complexity (-.046), and divisibility (i.e., trialability) (.037). So the two most relevant perceived innovation attributes for communication technologies appear to be compatibility, the degree of congruence with potential adopters' values and needs, and relative advantage, the degree to which an innovative product is perceived to be superior to previous ones (see also Holak, 1988; Lin, 1996).

Communication channels, the second element of diffusion, involves both interpersonal (e.g., word of mouth) and mass media (e.g., television) channels. While mass media channels offer the most effective means to create awareness and knowledge, that is, to inform the widest possible audience of individuals about the existence of an innovation, interpersonal channels are best to persuade potential adopters about the merits of an innovation.

The third element is time, which is an important dimension in determining the innovation-decision process and measuring adopters' degree of innovativeness. The innovation-decision process is "the process through which an individual (or other decision-making unit) passes from first knowledge of an innovation to forming an attitude toward the innovation, to a decision to adopt or reject, to implementation and use of the new idea, and to confirmation of this decision"

(p. 20). Therefore, it contains five main steps: knowledge, persuasion, decision, implementation, and confirmation.

At the knowledge stage, the individual becomes aware of and gains basic information about the innovation (e.g., how does it work). Socioeconomic qualities, personality traits, and communication behavior can affect the degree of awareness and knowledge of an innovation. Specifically, earlier knowers are more likely to have more formal education, higher socioeconomic status, and greater exposure to mass media channels than later kwowers (Rogers, 1995). At the persuasion stage, individuals form favorable or unfavorable attitudes toward the innovation. They seek further information about the new idea and evaluate its pros and cons, relying particularly on interpersonal communication. In so doing, potential adopters develop a general perceptual map of the innovation primarily based on its relative advantage, compatibility, and complexity. At the decision stage, the individual "engages in activities that lead to a choice to adopt or reject an innovation" (p. 171). Individuals express their intention to adopt or reject the innovation (e.g., purchase intention and willingness to pay). On repeated occasions, marketing researchers have used purchase intention as a surrogate measure of innovation adoption, because they have found that purchase intention correlates with product trial (see Holak, 1988).

The other two stages, implementation and confirmation, do not apply to this study, because HDTV sets were not yet available on the consumer market at the time of the survey. So this research investigates pre-adoption or potential adoption instead of actual adoption of HDTV. Rogers (1995) defines "adoption" as "a decision to make full use of an innovation as the best course of action available" (p. 171). He classified adopters into five groups according to their level of innovativeness: innovators (2.5% of adopters), early adopters (13.5%), early majority (34%), late majority (34%), and laggards (16%). Innovativeness indicates how soon an individual decides to adopt a new idea. Earlier adopters (innovators, early adopters, early majority) differ from later adopters (late majority, laggards) in socioeconomic status, personality values, and communication behavior. Specifically, they are better educated, have higher income, and use mass media channels more frequently than later adopters (Rogers, 1995).

The fourth and final element of diffusion is the social system, which is "a set of interrelated units that are engaged in joint problem-solving to accomplish a common goal" (p. 23). Members of a social system can be individuals, groups, or organizations.

Hypotheses

Four sets of hypotheses were formulated based on diffusion theory and adoption studies for eight communication technologies (cable television, the video cassette recorder [VCR], the home satellite dish [TVRO], the personal computer [PC], videotex, audiotext, direct broadcast satellite [DBS], and the fax machine (see Table 1). A research question regarding the relative importance of these sets of variables in predicting HDTV awareness, interest, and purchase intention was also posed. The first four hypotheses relate demographic variables to the three dependent variables.

$H_{1.1}$: The younger respondents are, the more they will be aware of HDTV, express an interest in HDTV, and be likely to purchase an HDTV set.

$H_{1.2}$: The better educated respondents are, the more they will be aware of HDTV, express an interest in HDTV, and be likely to purchase an HDTV set.

$H_{1.3}$: The higher the income level of respondents is, the more they will be aware of HDTV, express an interest in HDTV, and be likely to purchase an HDTV set.

$H_{1.4}$: Male respondents will be as likely as female respondents to be aware of HDTV, express an interest in HDTV, and be likely to purchase an HDTV set.

Rogers (1995) hypothesizes that "Earlier adopters are not different from later adopters in age" (p. 269), although he is quick to point out the conflicting empirical evidence about the relationship between age and innovativeness. In a majority of communication technology studies (Table 1; see also Lupker et al., 1988), age was found to be negatively related to adoption. Therefore, Hypothesis 1.1 posits a negative relationship between age and the three dependent variables. Consistent with diffusion theory and most adoption studies, we expected a positive relationship between level of education and income and HDTV awareness, interest, and purchase intention. Diffusion theory is silent on the relationship between gender and innovativeness (or adoption), but most empirical studies suggest that gender is unrelated to communication technology adoption. Consequently, it was hypothesized that there would no difference between males and females in HDTV awareness, interest, and purchase intention.

The next block of four hypotheses deals with mass media exposure:

$H_{2.1}$: The more television respondents watch, the more they will be aware of HDTV, express an interest in HDTV, and be likely to purchase an HDTV set.

$H_{2.2}$: The more radio respondents listen to, the more they will be aware of HDTV, express an interest in HDTV, and be likely to purchase an HDTV set.

$H_{2.3}$: The more respondents read newspapers, the more they will be aware of HDTV, express an interest in HDTV, and be likely to purchase an HDTV set.

$H_{2.4}$: The more respondents see movies in theaters, the more they will be aware of HDTV, express an interest in HDTV, and be likely to purchase an HDTV set.

Diffusion theory holds that earlier adopters will use mass media more frequently than later adopters (Rogers 1995), but that generalization is rarely borne out by empirical evidence for communication technology adopters (see Table 1). Amount of television viewing is the only significant media use predictor common to several adoption studies. More often than not, mass media use is unrelated to adoption of any of these eight communication technologies. Nevertheless, being theoretically grounded, this study hypothesizes that television use, radio use, newspaper use, and frequency of moviegoing will all be positively correlated with HDTV awareness, interest, and purchase intention.

The third main hypothesis is a corollary of Hypothesis 1.3:

> **H_3:** The greater the number of home entertainment products respondents own, the more they will be aware of HDTV, express an interest in HDTV, and be likely to purchase an HDTV set.

Because earlier adopters generally have higher socioeconomic status than later adopters (Rogers, 1995), it follows that they will also be more likely to own consumer electronics items. Empirical research has shown that home satellite dish (TVRO), cable television, and personal computer adopters were more likely to own related entertainment products (e.g., video games, VCR, PC) than nonadopters (Danko & MacLachlan, 1983; Dickerson & Gentry, 1983; Lin, 1996; Litman, Chan-Olmsted, & Thomas, 1991; Rothe, Harvey, & Michael, 1983; see also Lupker et al., 1988). Therefore, we hypothesize a positive relationship between ownership of home entertainment products and HDTV awareness, interest, and purchase intention.

The last group of hypotheses examines consumer responses to television technology attributes:

> **$H_{4.1}$:** The higher respondents value the importance of picture sharpness, the more they will be aware of HDTV, express an interest in HDTV, and be likely to purchase an HDTV set.

$H_{4.2}$: The higher respondents value the importance of sound quality, the more they will be aware of HDTV, express an interest in HDTV, and be likely to purchase an HDTV set.

$H_{4.3}$: The higher respondents value the importance of screen size, the more they will be aware of HDTV, express an interest in HDTV, and be likely to purchase an HDTV set.

These three television characteristics have often been touted as selling points for HDTV technology. Lupker et al. (1988) reported that motion quality, sense of depth, picture sharpness, and set size were all significant predictors of HDTV purchase intent at $1,500. At the $2,500 price range, significant predictors included motion quality and set size. Therefore, we would expect that the more respondents value picture sharpness, sound quality, and screen size, the more they will be aware of HDTV, express an interest in HDTV, and be likely to purchase an HDTV set.

Finally, the following research question was posed:

RQ: What is the relative influence of demographics, mass media use, ownership of home entertainment products, and television attributes in predicting HDTV awareness, interest, and purchase intention?

Despite the voluminous diffusion literature, little research has been conducted to determine how blocks of variables such as those above compare to each other in predicting adoption of communication technologies. For instance, are demographics better predictors of adoption than mass media exposure, or is it the opposite? Jeffres and Atkin (1996) found that "assessment of media quality" and "media exposure" influenced people's likelihood to use new technologies for consumer purposes to a greater extent than did "demographics." Although a formal prediction is difficult to state at this point, we would expect, based on a number of empirical studies (see Danko & MacLachlan, 1983; Dickerson & Gentry, 1983; Litman, Chan-Olmsted, & Thomas, 1991; Lupker et al., 1988; Rothe, Harvey, & Michael, 1983), that both demographics and ownership of home entertainment products will play a significant role in determining HDTV awareness, interest, and purchase intention.

Method

A simple random sample of 613 phone numbers in the Miami, Florida, area were called during the evening hours of March 3 to March 20, 1995. Telephone numbers were drawn from the most recent edition of the city telephone directory, by first selecting randomly a page, then selecting randomly a column within the page, and finally selecting randomly a name with a phone number within the column. The last digit of the suffixes was then increased by 1 to account for unlisted phone subscribers. Interviewers were trained undergraduate students enrolled in a research methods class. All calls were made from a central location. Excluding non-eligible respondents (e.g., younger than 18), non-working numbers, and numbers that were never answered after six attempts, the completion rate was 58% (N = 193).

The questionnaire contained questions about five topics: (1) importance of television attributes; (2) HDTV awareness, interest, and purchase intention; (3) ownership of home entertainment products; (4) mass media use; and (5) demographics.

Television Attributes. Respondents were asked to rate the importance of picture sharpness, sound quality, and screen size on a 5-point scale ranging from extremely important (1) to not important at all (5).

HDTV Awareness, Interest, and Purchase Intention. Next, they were asked to report their HDTV awareness ("Have you ever heard about high-definition television?"). Then, whether or not respondents were aware of HDTV, interviewers briefly explained the three main characteristics of HDTV technology (sharper pictures; high-fidelity sound; and larger and wider screen). Afterwards, they asked respondents to evaluate their degree of interest in HDTV ("In keeping these characteristics in mind, can you tell me how interested you would be in acquiring a high-definition television set"?) on a 4-point scale from very interested (1) to not interested at all (4). The third dependent variable dealt with purchase intention. The question was: "According to the manufacturers, a high-definition television set will cost about $3,000 when first introduced. Suppose that you decide to buy a new television set in 1995. How likely would it be that you would buy a high-definition television set at this price." The response set ranged from very likely (1) to not likely at all (4).

Ownership of Home Entertainment Products. Respondents were asked whether they subscribed to cable television, and owned a VCR, a satellite dish, a video games system, a compact disc player, and a personal computer at home. These six variables were categorical (1 = yes; 2 = no).

Mass Media Use. Fourth, respondents were asked about their television use ("On average, about how many hours a day do you watch television?"), radio use ("On average, about how many hours a day do you listen to radio?"), newspaper use ("How many days a week, if any, do you read a daily newspaper?"), and frequency of moviegoing ("How many times did you go to see a movie last month?"). In addition, respondents answered how often they watch wildlife documentaries and sports on television on a 5-point scale, from about every day (1) to never (5).

Demographics. The questionnaire concluded with four demographic questions: age, education, income, and gender.

Because the calling area was bilingual, two versions of the same questionnaire, one in English and one in Spanish, were prepared.

Bivariate correlation analysis was used to test all hypotheses except the relationship between HDTV awareness and gender (chi-square test). Linear hierarchical regression was used to determine the relative influence of demographics, mass media use, ownership of home entertainment products, and television attributes in predicting HDTV interest and purchase intention. Logistic hierarchical regression, instead of linear regression, was used to answer the awareness component of the research question, because HDTV awareness was a categorical variable (see Hosmer & Lemeshow, 1989). All categorical variables were recoded as dummy variables (0 = no; 1 =yes). Scales for television attributes, viewing of documentaries, and viewing of sports were recoded from 1-5 to 5-1; scales for HDTV interest and purchase intention were recoded from 1-4 to 4-1. To test Hypothesis 3, an index for home entertainment products was created by aggregating responses to the six ownership variables (cable subscription, VCR, satellite dish, video games system, compact disc player, and personal computer). The scale ranged from 0 to 6. In the regression analyses, two specific viewing measures, sports and documentaries viewing, were added as predictors. There has been some speculation whether sports and wildlife documentaries might represent programming killer applications for HDTV, because these types of television content might greatly benefit from a wider aspect ratio (see Neuman, 1988). The inclusion of these variables in the media use block of the hierarchical regressions will allow us to explore this possibility.

Findings

Descriptive results

The sample had a median age category of 30-39 and a median annual household income category of $30,000-$45,000. Of all respondents, 16.0% did not complete high school, 18.8% were high school graduates, 29.8% had some college, 20.4% were college graduates, and 14.9% pursued graduate work or received a graduate degree. In all, 65.1% had at least some college education. Females comprised 50.8% of the sample. Nationally, the median age was 34, the median annual household income was $32,264 (1994), 51.2% of the population were female, and 47.7% had at least some college education (U.S. Bureau of Census, 1996). So the composition of the sample did not differ demographically from that of the national population except in educational level.

Respondents' ownership of home entertainment products also reflected national trends (see Consumer Electronics Manufacturers Association, 1996; National Cable Television Association, 1995). Of the respondents, 67.7% subscribed to cable television, 84.6% owned a VCR, 10.1% owned a satellite dish, 41.8% owned a video games system, 62.4% owned a compact disc player, and 38.3% owned a personal computer. Nationally in 1995, 64% of all U.S. households subscribed to cable television, 88% owned a VCR, 63% owned a compact disc player, and 40% owned a personal computer.

An overwhelming majority of respondents rated sound quality (82%) and picture sharpness (77.8%) as either "very important" or "extremely important." But only 45% felt that screen size was either "very important" or "extremely important." On average, respondents watched about 3 hours and 4 minutes a day, listened to radio for 2 hours and 47 minutes, read a daily newspaper four times a week, and attended movies 1.67 times during the month preceding the survey. In addition, 46.2% and 37.1% watched wildlife documentaries and sports programs at least a few times a week, respectively.

The study also revealed that 32.1% of the respondents were aware of HDTV. A majority (58.3%) expressed interest in acquiring an HDTV set based on the specifications enunciated by the interviewers (somewhat interested: 25.3%; very interested: 33%). On the other hand, only 15.5% indicated that they would be likely to purchase an HDTV receiver at a price tag of $3,000 (somewhat likely: 9.6%; very likely: 5.9%).

Hypotheses

None of the hypotheses received full support for all three dependent variables--HDTV awareness, interest, and purchase intention (Table 2). However, both Hypothesis 1.3 (income) and Hypothesis 4.1 (picture sharpness) came close by correlating significantly with both HDTV awareness and interest. Higher-income respondents and those who placed more importance on picture sharpness were more aware of HDTV and expressed a greater interest in an HDTV set than lower-income respondents and those who felt that picture sharpness was less important. As expected, age was negatively related to HDTV interest ($H_{1.1}$); education was positively related to HDTV awareness ($H_{1.2}$); newspaper use was positively related to HDTV awareness ($H_{2.3}$); frequency of moviegoing was positively related to HDTV interest ($H_{2.4}$); and screen size was positively related to HDTV purchase intention ($H_{4.3}$). Contrary to Hypothesis 1.4, gender was significantly related to HDTV awareness ($\underline{X}^2[1, \underline{N} = 181] = 14.69, \underline{p} < .001$): Male respondents were more aware of HDTV than their female counterparts. Males also expressed a greater interest in an HDTV set than females, although that correlation coefficient ($\underline{r} = .14$)

was marginally significant ($p = .060$). Finally, Hypothesis 3 (home entertainment products) was supported for HDTV interest and marginally so for HDTV awareness ($p = .069$). Those respondents who owned more home entertainment products were more interested in HDTV than those who owned fewer of these items (Table 2).

Research Question

The research question examined the relative influence of demographics, mass media use, ownership of home entertainment products, and television attributes in predicting HDTV awareness, interest, and purchase intention. Demographic variables (age, education, income, and gender) were entered first, followed by mass media use (television use, radio use, newspaper use, moviegoing, documentaries viewing, and sports viewing), ownership of home entertainment products, and importance of television attributes (picture sharpness, sound quality, and screen size). The logistic hierarchical regression reveals that income, gender (male), and picture sharpness were significant positive predictors of HDTV awareness (Table 3). The Wald statistic, the equivalent of the t test in linear regression, was used to determine the statistical significance of the regression coefficients (see Norusis, 1994). The improvement chi-square (X^2) test, which is comparable to an F-change test in linear regression, tested the null hypothesis that coefficients for the variables added at each step of the regression were 0. The findings indicated that the model with the demographic variables (block 1) constituted a significant improvement in predicting HDTV awareness over the constant-only model. Importance of television attributes (block 4) contributed significantly ($p = .078$) to improving the fit of the HDTV awareness model.

In the first linear hierarchical regression (Table 4), age (negative), income, moviegoing, sports viewing (p = .064), and picture sharpness (p = .088) were found to be significant predictors of HDTV interest. Independent variables accounted for 25% of the variance in interest in acquiring an HDTV set. Television attribute variables were more successful than mass media use and ownership of entertainment products in explaining additional variance in HDTV interest above that for the first block.

In the second linear hierarchical regression (Table 5), the only major predictor of HDTV purchase intention was screen size. Independent variables accounted for 11% of the variance in the HDTV purchase intention model. Only the R^2 change for the block containing television attributes was significant.

Discussion and Conclusions

While some hypotheses did not gain support, especially in regard to HDTV purchase intention, those who did were almost always consistent with diffusion theory and research. Although it is difficult to profile HDTV potential adopters with great precision because the technology is still in a pre-adoption stage, certain characteristics clearly emerge. Innovators and early adopters of HDTV receivers will likely have higher income, be frequent moviegoers, watch sports programs, and express a keen interest in large-screen televisions.

This preliminary description is consistent with past research conducted outside and in the United States. For instance, Bouwman, Hammersam, and Peeters (1993) also found that those Dutch respondents who desired a wider and larger screen as a television improvement were more willing to buy an HDTV set for about ECU 2,200 (about $2,700). In their Belgian study, Dupagne and Agostino (1991) reported positive correlations between moviegoing and importance of having an HDTV set at home. The finding that sports viewing is a predictor of HDTV interest substantiates some anecdotal evidence that content will matter in the adoption of HDTV (see Neuman, 1988). It may well be that sports programming aired in HDTV could produce highly favorable attitudes among potential viewers, which could in turn increase existing viewership. Though insignificant in the regression analysis, there was a significant positive relationship between the number of home entertainment products owned and HDTV interest. Again, this result confirms previous HDTV audience research (see Lupker et al., 1988).

The hierarchical regressions revealed that demographics and television attributes were stronger predictors of HDTV awareness and interest than mass media use and ownership of home entertainment products. Jeffres and Atkin (1996) noted "a diminished role for demographics" (p. 328) in their study of technology use, but that observation was not supported in this study. Future diffusion research should evaluate whether the influence of demographics on communication technology adoption depends on the nature or characteristics of the technology. From Table 1, it would appear that adoption of hardware-based communication technologies, such as the VCR, TVRO, and the PC, is especially contingent upon certain demographic variables.

The perceived relevance of such television attributes as picture sharpness and screen size for some prospective HDTV adopters contradicts the often-held view (e.g., Negroponte, 1995) that television characteristics and improvements are unimportant to the American public. Other things being equal (e.g., price), viewers prefer HDTV features to those of NTSC (Lupker et al., 1988). A recent HDTV-versus-NTSC comparative test, commissioned by Harris Corporation, further corroborates this assertion. Of the 104 respondents, 98% felt that digital HDTV was superior to traditional NTSC television; 96% stated that they liked the shape of the 16:9

receiver; and 97% reported that HDTV sound (5.1 channel system) was superior to NTSC sound (stereophony) (Harris Corporation, 1997). If indeed these HDTV attributes truly matter, U.S. broadcasters would be well inspired to transmit their programs in HDTV format, instead of delivering them in lower-resolution SDTV.

This study also has practical implications for consumer electronics manufacturers. The good news is that a majority of respondents (58.3%) expressed an interest in HDTV and its features. On the other hand, only 15.5% of the sample reported a willingness to purchase an HDTV receiver at $3,000, an expected low-end figure for the first HDTV sets that will be introduced in the United States at the end of 1998. This percentage is similar to the one (14%) reported by Lupker et al. (1988) seven years earlier. Not surprisingly, and consistent with previous research (e.g., Dupagne & Agostino, 1991), an overwhelming majority (93.1%) of the respondents were either somewhat or very satisfied with their current television set. To overcome the price objection, which is likely to be acute in the initial diffusion of HDTV, consumer electronics marketers should adopt pull promotion strategies by stimulating interest and demand at the end-user level (instead of wholesalers and retailers), that is, targeting directly the consumer with advertising messages. Of particular importance, these campaigns should tout HDTV's relative advantages, such as picture sharpness and screen size. As discussed above, relative advantage is a key determinant of an innovation's rate of adoption (see Rogers, 1995).

Finally, this research is not without weaknesses. The sample size is limited even for an exploratory study. It is also important to stress that the results derive from a single market, not from a national survey, although the sample composition was representative of the U.S. population at large in terms of age, gender, income, and ownership of home entertainment products. Furthermore, it may be argued that respondents' HDTV interest and purchase interest cannot be meaningfully measured without prior exposure to live demonstrations of HDTV pictures. A public demonstration would certainly have enhanced the relevance of consumer reactions. From this perspective, lack of context is another limitation of this study. On the other hand, unlike surveys or experiments presenting NTSC-HDTV side-by-side comparisons (e.g., Lupker et al., 1988; Neuman, 1988), this study has used a probabilistic procedure to select respondents, allowing greater external validity. Despite these limitations, the results of this research offers some preliminary diffusion-grounded insights into U.S. consumer awareness and interest in HDTV prior to its market introduction in the United States.

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Table 1

Predictors of Communication Technology Adoption According to Demographic and Media Use Variables

Technology	Diffusion Theory	Cable	Cable (pay)	Cable	Cable	VCR	VCR	VCR	TVRO
Demographics									
Age	ns	ns	-	ns	-	ns	-	-	-
Education	+	ns	ns	ns	ns	+	ns	+	ns
Income	+	-	+	ns	+	+	+	+	+
Gender (male)		ns	ns	ns	ns	ns	ns		
Mass Media Use	+								
Television use		-	ns	+		+		+^{a}	ns
Radio use		ns	ns	ns		+			ns
Newspaper use		ns	ns	ns		ns		ns	ns
Moviegoing		ns	ns	ns		ns			ns
Study	Rogers, 1995	Collins et al., 1983	Reagan et al., 1985	Reagan, 1987	Reese, 1988	Reagan, 1987	Reese, 1988	Scherer, 1989	Litman et al., 1991

Note. ns = nonsignificant; + = positive predictor; - = negative predictor; ^{a}non-news.

Technology	Diffusion Theory	PC	PC	PC	PC	Videotex	Videotex	Audiotext	DBS	Fax
Demographics										
Age	ns	+	-	-	-	-	-	ns	ns	-
Education	+	+	+	ns	+	+	ns	+	ns	ns
Income	+	+	ns	+	+	ns	ns	ns	ns	+
Gender (male)				ns	ns		-	-	+	ns
Mass Media Use	+									
Television use			-	ns			-		ns	ns
Radio use				-			ns			ns
Newspaper use				-		ns	ns			ns
Moviegoing				+			ns			+
Study	Rogers, 1995	Dickerson & Gentry, 1983	Danko & MacLachlan, 1983	Reagan, 1987	Reese, 1988	Ettema, 1984	Reagan, 1987	LaRose & Atkin, 1992	Bruce, 1996	Neuendorf et al., 1996

Note. ns = nonsignificant; + = positive predictor; - = negative predictor.

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Table 2

Zero-Order Correlations of Demographics, Mass Media Exposure, Ownership of Home Entertainment Products, and Television Attributes with HDTV Awareness, Interest, and Purchase Intention

Dependent Variable Independent Variable	**HDTV Awareness**	**HDTV Interest**	**HDTV Purchase Intention**
Demographics			
Age	-.06	-.27**	.01
Education	.26**	.12	-.03
Income	.42**	.25**	.07
Gender[a]	--	.14 (p = .060)	.10
Mass Media Use			
Television use	-.12	-.12	.01
Radio use	.04	.12	.01
Newspaper use	.21**	.04	.03
Moviegoing	.03	.25**	-.06
Home Entertainment Products	.13 (p = .069)	.16*	.01
Television Attributes			
Picture sharpness	.14*	.17*	.01
Sound quality	-.06	.10	.10
Screen size	.06	.09	.24**

Note. [a]gender: 0 = female; 1 = male; *p < .05; **p < .01.

Table 3

Logistic Hierarchical Regression of Demographics, Mass Media Exposure, Ownership of Home Entertainment Products, and Television Attributes on HDTV Awareness

Block of Variables	**Coefficient (B)**	**Improvement X^2 Test**	**-2 Log Likelihood**
1. Demographics		36.77***	153.86
Age	-.12		
Education	.13		
Income	.51**		
Gender (male)	1.18*		
2. Mass Media Use		4.09	149.77
Television use	-.20		
Radio use	.05		
Newspaper use	.04		
Moviegoing	.08		
Wildlife documentaries	.19		
Sports	.01		
3. Home Entertainment Products	-.29	1.62	148.15
4. Television Attributes		6.81 (p = .078)	141.34
Picture sharpness	.63*		
Sound quality	-.57 (p = .095)		
Screen size	.18		

*p < .05; **p < .01; ***p < .001.

Table 4

Linear Hierarchical Regression of Demographics, Mass Media Exposure, Ownership of Home Entertainment Products, and Television Attributes on HDTV Interest

Block of Variables	Beta	R^2 Change	R^2	Adjusted R^2
1. Demographics		.14***	.14***	.11
Age	-.18*			
Education	-.03			
Income	.21*			
Gender (male)	.01			
2. Mass Media Use		.06	.19**	.13
Television use	-.14			
Radio use	.02			
Newspaper use	-.04			
Moviegoing	.19*			
Wildlife documentaries	-.02			
Sports	.16 (p = .064)			
3. Home Entertainment Products	.01	.00	.19**	.13
4. Television Attributes		.06*	.25***	.17
Picture sharpness	.15 (p = .088)			
Sound quality	.05			
Screen size	.13			

*p < .05; **p < .01; ***p < .001.

Table 5

Linear Hierarchical Regression of Demographics, Mass Media Exposure, Ownership of Home Entertainment Products, and Television Attributes on HDTV Purchase Intention

Block of Variables	Beta	R^2 Change	R^2	Adjusted R^2
1. Demographics		.02	.02	-.01
Age	.01			
Education	.02			
Income	.02			
Gender (male)	-.01			
2. Mass Media Use		.04	.06	-.01
Television use	-.07			
Radio use	.03			
Newspaper use	.10			
Moviegoing	-.05			
Wildlife documentaries	.06			
Sports	.14			
3. Home Entertainment Products	-.02	.00	.06	-.02
4. Television Attributes		.06*	.11	.02
Picture sharpness	-.01			
Sound quality	.02			
Screen size	.24*			

*$p < .05$.

The effect of the VCR on the Mass Media Markets in Korea, 1961-1993:

The Principle of Relative Constancy Reapplied

Sung Tae Kim

Doctoral Student
School of Journalism
Indiana University

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Author contact:
Sung Tae Kim
No. 613, Woodbridge Dr.
Bloomington, IN 47408
E-mail: sutkim@indiana.edu

Sung Tae Kim

The effect of the VCR on the Mass Media Markets in Korea, 1961-1993:

The Principle of Relative Constancy Reapplied

Abstract

By reapplying the principle of relative constancy (PRC) this article extends prior research about consumer expenditures on mass media. To analyze four major mass media markets including newspaper, movie, television, and the VCR, this study employed two different methods, a regression analysis and a market scale analysis between media markets and a gross national product (GNP). Research questions for this study were "Does the PRC exist in mass media markets in Korea from 1961 to 1993?" and "How much impact does the VCR have on previous mass media markets?" The results found in this study indicate that although consumer expenditures on individual mass media exhibited a positive or negative-constant trend, an overall mass media market witnessed a positive trend with the emergence of the VCR. Finally, the PRC failed to be supported by a regression analysis and market scale analysis.

The Effect of the VCR on the Mass Media Markets in Korea,1961-1993:

The Principle of Relative Constancy Reapplied

I. Introduction

We now live in a world in which communication technologies are an essential component of the social fabric. From the earliest forms of communication technologies to the most recent developments in computer technology, the consumption of information and communication technologies has been a central aspect of social life. However, the period of transition that we are now living, to some extent, differs from the period of change of older dominant media. The twentieth century has witnessed various media technologies such as movie, radio, television, videocassette recorders (VCR), and so on. These media have emerged around us and have significantly changed the environment of individual life as well as social contexts.

Although less than three decades old, the VCR has become a socially and economically significant communication technology. Unlike previous mass media, this technology has been perceived to provide the means for a great number of content and to make it more convenient for viewers to control video content in their homes. In addition, by allowing the consumer to tape television programs for a designated time and place to watch, the new technology has become one of the most profound contributions to modern mass media. Hence, this technology not only has had an important impact on the consumption of other media, but also has become one of the most significant media markets economically and culturally (Dupagne, 1994; Noh, 1994; Son & McCombs, 1993; Wood & O'Hare, 1991). Therefore it is important to look at the change of both consumer expenditures on mass media and the change of media markets brought by the introduction of new forms of media technologies.

Unlike the United States and other western countries, Korea has different social contexts and market components. For instance, compared to the United States and other western countries, the diffusion of the VCR has been relatively rapid in Korea. In 1982 the VCR was relatively uncommon in the Korean media markets, with fewer than 10 percent of the Korean households owning the VCR. Just ten years later, however, this new technology was represented in the majority of households, with 60 percent owning this new device (Won & Choi, 1991).

Based on the assumption that the VCR has played an important role in shaping the pattern of consumer expenditures on mass media, this study begins to explore the contours of this transformation by analyzing consumer expenditures on mass media and media markets. If looking at relevant studies focusing on this viewpoint, in accounting for the impact of new media on older media, the principle of relative constancy (PRC) has been most frequently employed by researchers.

It is very useful to question whether the PRC exists in Korea, an advanced developing country, if considering the fact that most previous studies were done in the developed countries such as the United States or other western countries. The results of this study represent the trends of the total expenditure on mass media, the effect of the VCR on older media markets, and market competition among major mass media in Korea during last three decades.

II. The Principle of Relative Constancy: Reconsideration and Critique

The development of new technical media may have a profound impact on the way in which consumers spend on mass media. Generally speaking we are undergoing a transition toward a so-called "information society". Thus, it is well assumed that the amount of money spent on mass media will increase. In other words, it is easily recognized that people would share more portion of their income to get new media and new technologies. Hence it seems natural to assume that consumer expenditures on mass media will increase more rapidly than expenditures on other goods or services. Until now there have been many empirical studies that have examined this question. However, a central assumption to this consideration is the principle of relative constancy (PRC). The original idea of relative constancy was stated by Charles E. Scripps as follows:

> If we may suggest one broad generalization, it is that in spite of the increasing complexity of mass communications with the advent of new media, the pattern of economic support has been relatively constant, and more closely related to the general economy than to the various changes and trends taking place within the mass media field itself. The consistency evident in the pattern of economic support for the mass media seems significant. It suggests that mass communications have become a staple of consumption in our society much like food, clothing, and shelter. Its stability in times of economic stress indicates that consumers feel that mass communications is a necessary of life, although their selection of media may vary (Scripps-Horward Research, 1959, 6).

However, it was not until the publication of a quantitative study by McCombs in 1972 that the PRC gave rise to an empirically supported hypothesis. In a pioneering study, McCombs (1972) examined two subcategories of total media spending, consumer expenditures for media and advertiser spending for media. McCombs found that the percentage of total expenditures spent on mass media was relatively constant for the time period between 1929-1968 in the United States. In addition, in a subsequent study, McCombs and Eyal (1980) updated this area of research to include more recent data, 1968-1977, and they reached the same conclusion which supports the assumption of the PRC.

Following McCombs' notion and more recent research about the PRC, this study distinguishes broadly between two different but related assumptions. The PRC has been used both to predict the proportion of income spent on the mass media (constancy assumption) and to find consumer expenditure variations within mass media categories, particularly in the case of the introduction of new communication technologies (functional equivalence assumption) (Dupagne, 1997a).

Briefly speaking, the key notions of the PRC supported by McCombs and following studies state, on the one hand, that the proportion of income devoted to the mass media does not change significantly over time, on the other hand, the emergence of new mass media technologies should not increase the proportion of total expenditures spent on mass media, which means that the expenditures for new media come from those for older media. Therefore, some empirical research has supported the PRC that consumer expenditures on mass media change proportionate to the fluctuation of the economy (Dupagne, 1994; McCombs, 1972; Son & McCombs, 1993; Wood & O'Hare, 1991). Moreover the PRC has also tested the change of the consumer expenditures on old media and new media with the emergence of new media technologies (Glascock, 1993; McCombs & Son, 1986; Noh, 1994).

For instance, Dimmick and Rothenbuhler (1984) have built upon the PRC with their theory of the niche. This theory stipulates different media must occupy critically different niches in order to coexist. When a new medium emerges, a certain overlap might be quite high so that eventually this will lead to either extinction or alteration in one of the competing media. A critical assumption of the niche theory is almost the same as the PRC in which the amount of money spent on media is relatively constant. Within this context the authors found that the introduction of new media technologies resulted in a high overlap and then it declined more tolerable levels as the media evolved.

In respect to the PRC, more recently, Glascock (1993) studied the effect of cable TV on mass media for the time period 1978-1990. He found that the expenditures on mass media may vary according to the time period examined. His study showed that a positive trend occurred; that is, the consumer expenditures on mass media during this time period increased. His findings did not support the notion of the PRC that spending on mass media is relatively constant.

In addition, some research findings have been presented outside of the United States (Dupagne, 1997b; Werner, 1986). Werner (1986) examined the public expenditures on mass media in Norway from 1958 to 1982. He found that the expenditure on mass media varies significantly according to the types of households. Low-consumption households spend higher proportion of total expenditures than high-consumption households. It means that media can be said to be a greater burden on low-consumption households, which are left with less to spend on other leisure activities or on education than high-consumption households. In another recent study, Dupagne (1997b) studied further the PRC by employing two new models and various independent variables in Belgium. His study suggests the need for incorporating new variables and methods in future mass media spending work.

Meanwhile, there was a critical identification of the original McCombs' study by Wood in 1986. By pointing out some problems inherent in McCombs' approach, Wood (1986) elaborated the PRC in terms of theoretical and methodological aspects. He argued that correlation analysis is not a sufficient method for testing the PRC because of the auto-correlation of time-series data. Moreover, he questioned the validity of zero correlation and argued that it could conceal the presence of significant variation within the examined time period. In addition, to get more accurate results, he recommended that disposal personal income (DPI) instead of personal income is a more reliable variable for testing the PRC. Thus, unlike McCombs' partial correlation approach and the "time-trend constancy model," Wood suggested the "income-share constancy model." This model posits that the share of income spent on mass media is relatively constant in comparison with the change of total income.

In a more recent critical study, Dupagne (1997a) pointed out the lack of adequate economic foundation in the PRC research and suggested the alternative models of consumer mass media expenditures. Thus, as a first step for developing more extensive models, Dupagne (1997b) formulated and tested two economic models, and included five independent variables such as price, population, unemployment, and interest rates as well as income which has been used as a predictor for testing the PRC. By using this alternative methods, he concluded that such variables as price and population were better factors for predicting the change of consumer expenditures on mass media than income.

However, it is too early to say whether the predictive value of the PRC will disappear or not. And there can be no doubt that the assumptions of the PRC continue to play an important role in estimating the relation between consumer expenditures on mass media and the economy or predicting the effect of new media technologies on other mass media markets.

Therefore, this study is conducted not only to test whether the PRC could be true in Korean mass media markets, but also to find the degree of impact of the VCR on other mass media markets by employing new methods including the market scale and cross-elasticity analysis between new media and old media markets. In other words, this study also investigates the fluctuation of mass media markets beginning in 1982, when the VCR eventually entered mass media markets in Korea. Since very little research on mass media expenditures has been conducted outside the United States and furthermore Korea seems to be a unique country for testing the PRC, this study could offer some meaningful implications. The research questions set up for this study are as follows:

Research Question 1. Does the principle of relative constancy exist in mass media markets in Korea from 1961 to 1993?

Research Question 2. How much impact does the VCR have on other mass media markets such as newspaper, movie, and television?

III. Methods

Data Collection

Recent Korean mass media markets have been composed of newspaper, magazine, radio, movie, television, VCR, and other minor media markets.[1] During the last three decades, however, it has been well assumed that the four major mass media markets such as newspaper, movie, television, and VCR have represented a dominant proportion of consumer expenditures on the mass media.[2] Thus, this study focused on the these four major mass media not only to test the PRC and but also to examine the effect of the VCR, as a new medium, on the other major mass media markets.

Unlike the traditional methods employed in previous the PRC research, this study focused on the fluctuation of the mass media markets over time. This study analyzed the size of mass media software markets and the GNP because it is difficult to access to the Korean media market information, especially hardware industries.[3] Nevertheless it has been believed that hardware markets are twice the size of software markets (Samsung Economic Institute, 1993). The information about most minor media markets has not been reported on a yearly basis. Therefore, it was assumed that these alternative methods increase the reliability of the findings of this research.[4]

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[1] The cable television was introduced in 1995. Thus, although the size of this medium market has rapidly increased, this market was excluded for the study.

[2] The radio software market was not included in this analysis, because it is not a significant size enough to compare to other major mass media software markets. In addition, it has been reported that the size of radio market has not declined, thus, the exclusion of radio market does not affect significantly the results of this study (KOBACO, 1994).

[3] For testing the PRC, however, most previous studies have used such variables as personal income (PI), disposal personal income (DPI), and income share of household's expenditures on the hardware and software of mass media (DPI; e.g., McCombs, 1972; Wood & O'Hare, 1991)

[4] Because this study examined four major media markets with excluding other minor media markets to test the PRC, this study might have a problem of generalization of the findings. However, this problem is

As an indicator for the economic development in Korea, the gross national product (GNP) reported by the *National Statistical Abstract of Korea*, which is annually published by the Bank of Korea, was used. The annual data for 1961-1993 mass media markets were obtained from the following sources: the data for the newspaper markets, including subscriptions and advertising, were obtained from the *Korean statistic annual* (published by The Bank of Korea) and the *Advertising Annual* (reported by the Korea Broadcasting and Advertising Cooperation) ; the movie markets from the *Film Annual* (released by Korea Film Cooperation); the date for consumer expenditures on the television including television subscriptions and advertising were obtained from the Korean Broadcasting System (KBS) and the Korea Broadcasting and Advertising Cooperation (KOBACO); and the VCR markets including the retail/rental markets and sale market originated from the *electricity Annual* published by the electricity newspaper.[5]

Model Building and Data Analysis

This study conducted two complementary methods different from the original method used by McCombs (1972). First, this study employed the "income-share constancy hypothesis," as Wood (1986) has defined, because it is assumed that the rapid economic development in Korea makes an income variable more important than time.

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inevitable to gather the credible data. In spite of this limitation, the results found in this study could tell the general trend of Korean media markets over time, in particular since the advent of the VCR in 1982.

[5] In gathering the data of the VCR market, the pirate video markets were not included. Thus, it is assumed that the actual market scale of the VCR is larger than the data reported in this study.

Moreover, the time period of 33 years for this study may be shorter than that of the previous studies in the United States.[6]

As a first method, a longitudinal regression analysis was used to find the trend of the four major media markets over the last three decades. Thus, individual media market was regressed with the GNP to test the PRC in Korea. To determine whether a trend was constant or not, the following regression model was set up for this study:

Model 1: $M_t = A_0 + A_1 GNP + E$ (M_t: the size of mass media markets of t year; A_0: a constant term; A_1: a regression coefficient between the GNP and media markets; E: an error term)

To obtain the coefficient, the GNP and media markets were regressed together. In this model, the GNP was used as an independent variable and the size of media markets as a dependent variable. Because a regression coefficient is the slope of the parametric curve resulting from the relationship of an independent variable (GNP) and a dependent variable (media markets), it can be used to illustrate consumer expenditures on mass media over time. It may be interpreted that the closer to zero the value of coefficient (A_1) is, the more constant the size of media markets is. Moreover a constant term (A_0) also was interpreted to determine whether the trend was a positive or negative. According to Wood (1986), the PRC will be not supported whenever A_0 is different from zero. And whereas a positive A_0 indicates a negative trend which means that the income share of consumer expenditures on media increases, a negative A_0 implies the opposite.[7]

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[6] Prior to conducting this study, the correlation between income and time variable was calculated. The coefficient of these two variables was (.999) from 1961 to 1993. Thus, the "income-share constancy model" may indicate the trend of media markets in relation to the change of time as well as GNP.

For the diagnosis of auto-correlation which is frequently shown in the time serial data such as the GNP or the market index, this study conducted the Durbin-Watson test. It has been well known as the most efficient approach to detect auto-correlation (Beach & McKinnan, 1978). Auto-correlation seems to occur when successive observations of a variable are related to each other over time, violating the assumption of residuals independence (Hanke & Reitsch, 1992). When the auto-correlation was detected, the date were transformed by the Paris-Winsten method to remove it.

As a second method, this study also employed the media market scale analyses including the percentage of media markets in the GNP and the market elasticity to the GNP.

Model 2: Market Scale (M, %)= Media Markets/GNP

Model 3: Market Elasticity (E_{MG})= ΔMedia Markets/ΔGNP

Model 4: Cross Elasticity of Media Markets (E_{MV})= Δ Media Markets/ΔVCR Market

These models based on the economic analysis were formulated to identify the fluctuation of media markets in a more specific short-term time period which could not be described by the regression analysis, as Wood (1986) noted. The previous PRC literature has focused more on whether the trend existed or not during selected time period rather than the level of fluctuation of consumer expenditures on mass media. By conducting the market analyses, this study tried to trace back the specific fluctuation of the media markets in a specific time.

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[7] For Wood, A_0 is an exercise in statistical inference. Thus, he recommended that it should not be taken as a comprehensive prediction. In this study, a regression coefficient (A_1) will be used as a main predictor.

Model 2 is a percentage of media markets in relation to the GNP. This percentage (M, %), calculated by dividing the amount of mass media markets with the GNP, indicates the proportion of media markets in the national economy. By showing the change of the market percentage over time, the results of regression analysis were implemented. Model 3 and 4 are the representation of a dynamic change of media markets. Media elasticity (E_{MG}) was obtained by dividing the ratio of media market change between a specific year (t) and very previous year (t-1) with that of the GNP. The cross elasticity of media markets (E_{MV}) was also calculated by dividing the ratio of other media market changes with that of the VCR. Particularly Model 4 was also used to illustrate the impact of the VCR on other previous mass media markets such as newspaper, movie, and television. As a result of this analysis, for instance, "1" means that the changing velocity of increasing or decreasing between two variables compared is the same, which means that the media markets are relatively constant to the GNP or the VCR market over time. More or less than "1" indicates that the change of media markets is faster or slower than the change of the GNP or the VCR market.

Finally, this study also analyzed the impact of the VCR on other mass media markets by the time period. This study selected both short-term (3 years) and long-term (12 years) time periods to recognize the different impact and diffusion according to time span after the VCR's introduction in Korea in 1982. This additional analysis was added for the purpose of overcoming the limitation of regression analysis that could not give a sufficient answer to the impact of new media in these days when new media emerge rapidly, which was also recommended by Wood (1986).

IV. Results

Table 1 summarizes the regression analysis of mass media markets and the GNP in Korea from 1961 to 1993. The regression analysis of this study shows that mass media markets in Korea have moved positively in comparison with the growth of the GNP. In other words, the findings in Table 1 indicate that the four major mass media markets increased slightly more than the economy; that is, consumers have spent more money on mass media as time went on.

Table 1

Regression Analysis Testing the PRC of Mass Media Markets in Korea,1961-1993

Media	N	A_1	A_0	R^2	Trend**
Newspaper(1961-)	33	.0124*	-.03	.75	positive-constant
Movie(1961-)	33	-.0085*	+9.02	.32	negative-constant
TV(1970-)	24	.0187*	-.90	.68	positive-constant
VCR(1982-)	12	.0385*	-38.54	.56	positive-constant
Total(1961-)	33	.0574*	-.19.21	.48	positive

N: number of year, A_1: a regression coefficient, A_0: a constant term

*P<.001, ** at the level of .05

The regression coefficient (.0574) for the four major mass media markets including newspaper, movie, television, and the VCR was found to be significantly and positively different from zero at the level of (.05). In terms of the growth of individual mass medium market, only the movie market demonstrated a negative-constancy, as opposed to positive-constant trend of other media markets, but not significantly different from zero at the same level. This trend also could be explained by A_0 Table 1 shows that constant terms (A_0) of other mass media markets except for the movie market were a negative number which means a positive trend over time. As an interesting finding, in addition, the penetration of the VCR in 1982 into the previous mass media markets changed the trend from a positive-constant to a positive trend, which indicates that the PRC received little support in Korea during the last three decades.

Table 2

Summary of Media Market Scale Analysis in Korea by decades, 1961-1993

	1961-1969		1970-1981		1982-1993	
Media	M(%)	E_{MG}	M(%)	E_{MG}	M(%)	E_{MG}
Newspaper	.213	1.23	.196	.96	.216	1.04
Movie	.408	1.76	.189	.58	.082	.96
TV	-	-	.271	1.35	.424	1.19
VCR	-	-	-	-	.350	2.03
Total	.621	1.64	.656	.94	1.07	1.72

M(%)=media markets/GNP, E_{MG}= Δmedia markets/ΔGNP

The mass media market enlargement brought by the VCR was also shown by the market scale analysis. As Table 2 shows, the four major mass media markets in Korea have experienced up and down trends at selected time periods in spite of the result of regression analysis demonstrating a positive trend. According to the market analysis, whereas the newspaper market maintained a relative constant proportion in the GNP in spite of the emergence of the television and the VCR market, the movie market boomed through the 1960s, but abruptly declined with the beginning of the television market in 1970. (see Table 2, Market percentage dropped from .408 to .082). From the emergence of the television market on, however, the fluctuation of the movie market to the GNP became relatively static and constant, which could be interpreted by the recent market elasticity of (.96).

In the light of total media markets, as shown in Table 2, the mass media markets have experienced one uprising fluctuation with the introduction of the VCR market in 1982. From the 1960s to the 1970s, the proportion of major mass media markets was around .65% in the GNP, which means that the emergence of the television market did not increase the total market size. Hence, according to this study, it could be understood that a larger portion of the television market came from the movie market revenue. Thus, Table 2 indicates that the PRC had been supported in Korea until the emergence of the VCR in 1982. However, the advent of the VCR market stood on the way to deny the PRC by bring the enlargement of the mass media market percentage in the GNP from about .65% to 1. 07%.

This study also focused on the impact of the VCR as a new mass medium on the previous mass media markets such as newspaper, movie and television and compared it with that of the United Sates, which was conducted by Wood and O'Hare in 1991. The data in Table 3 indicate that the VCR's penetration into mass media markets brought an increase of coefficient but with a different level in both countries Korea and the United States. In Korea, the VCR's advent into mass media markets enlarged the coefficient from (.047) to (.83), whereas the expansion of media markets in United States was relatively low in comparison with that of Korea. This means that the growth of mass media markets as well as the diffusion of the VCR in Korea was relatively faster than the United States.

Table 3

Comparison of Impact of VCR on Mass Media Markets, Korea and the United States

Country	Time	N	Coefficient(A_1)	Constant Term(A_0)
Korea	Before (1961-81)	21	.047*	-.782
	After (1982-93)	12	.083*	-31.674
U.S.A.**	Before (1969-78)	10	.024*	3.151
	After (1979-88)	10	.056*	-75.95

N: number of year, *P<.01, **source: Wood and O'Hare (1991, p.27)

In the United States, according to Wood and O'Hare's study (1991), the change of coefficient between before and after the VCR emergence confirmed that consumer expenditures on mass media could deviate considerably from a constant fraction of income with a new media technology. Hence, although the impact of the VCR and media environments in both countries are different, the data of Table 3 suggest that the introduction of new video technologies may have structurally changed the media markets as well as consumer expenditures on mass media. In other words, the addition of the VCR changed the trend for consumer expenditures on mass media to positive and it also revealed that the PRC was not supported by both this study and Wood and O'Hare's study.

As described in the earlier parts of this paper, this study assumes that by time span there will be a different impact of the VCR on other media markets. The data in Table 4 indicate that the degree of impact of the VCR as a new medium technology on the older media markets such as newspaper, movie, and television. The cross elasticity was obtained to examine the impact of the VCR in Korean media markets and time period

Table 4

Comparison of Short-term and Long-term Impact of VCR on Other Media

	Short-term		Long-term	
Media	N	E_{MV}	N	E_{MV}
Newspaper	3	.46	12	.94
Movie	3	.05	12	.78
TV	3	.32	12	1.07

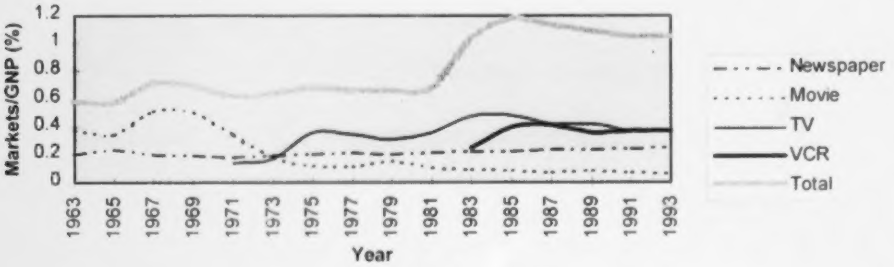
N: number of year, E_{MV}: cross elasticity =Δ media markets/ΔVCR market was divided into short-term and long-term to recognized the different effect of the VCR. The results found in this study suggest that it is a general trend of other media markets that during the beginning time period of the VCR's advent the growth of the older media markets shown a sudden downfalling trend at the expense of a rapid expansion of the VCR which attracted significant consumer spendings. As time goes on, however, other media markets gradually have recovered their market revenues.

As Table 4 shows, if looking at the short-term impact of the VCR on individual medium market, the newspaper market was less influenced by the VCR than other visual media markets such as movie and television. Thus, It could be plausibly argued that the VCR deprived other mass media or non-media goods and services of the additional consumer expenditures for this new medium. As time goes on, none the less, other previous media have recovered their markets in relation to the growth of the VCR market. Thus, the cross elasticity between other media markets and the VCR market in long-term time period closed to "1," which means that the changing ratio of other media markets and the VCR market is eventually the same.

V. Discussions

The aim of this empirical research was to investigate the PRC in Korean mass media markets during the last three decade and to sketch the effect of the VCR's penetration into mass media markets in 1982.

Figure 1. Change of Mass Media Markets in Korea, 1961-1993



The conclusion found in this study indicates that the consumer spending on mass media has been a positive trend. Figure 1 well demonstrates the change of the software markets of the four major mass media in Korea during the last three decades and the impact of the VCR on other mass media markets such as newspaper, movie, and television.[8] In sum, this study supported the argument first raised by Wood (1986) that consumer spending on mass media may vary according to the time period examined.

During examined time periods, although consumer expenditures on other mass media exhibited a positive or negative-constant trend, an overall consumer expenditure on the four major mass media was a positive trend with the emergence of the VCR market. In other words, the pie of media markets has relatively increased in relation to the growth of the GNP. The results found in this research are correspondent with other research findings of Glascock (1993) and Wood and O'Hare (1991). On the basis of these findings, several important points should be noted.

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[8] Previous research conducted in Korea has shown that the amount of consumer spending on print media such as newspaper, book, magazine and so on has been relatively constant at about one percent of GNP and one third of all expenditures on total mass media. In addition, it has been estimated that the size of mass media hardware markets is around twice times of that of software markets (Samsung Economic Institute, 1993). Therefore, the results found in this study focusing on software markets could explain, to some extent, the trend of total mass media markets in Korea.

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First, since the 1970s, most research about consumer expenditures on mass media has been conducted with the assumptions of the PRC. However, it is important to realize that the PRC is a hypothesis or a set of assumption rather than an economic theory (Dupagne, 1997a). Moreover, in recent empirical studies, the PRC has not gained ground among media researchers. With a rapid advent of new media technologies, the PRC may become more vulnerable to criticism.

A variety of more specialized criticism have appeared, some concentrating on the length of time period examined for the study (Glascock, 1993; Wood, 1986), some on a theoretical and methodological critique (Dupagne, 1997a; Wood, 1986), others on a different economic or cultural context (Dupagne, 1994; Werner, 1986). For instance, by using the market analysis based on economic theory, the results found in this study demonstrated the short-term fluctuation of media markets, as opposed to the assumptions of the PRC. However, this is not to say that the PRC is useless within communication research discipline. In spite of these criticisms the PRC has its role to illustrate the relation between income and consumer expenditures on media. This means that the PRC is a suggestive but not entirely persuasive approach.

Recently, Koreans are facing the new media technologies such as cable TV, DBS, the Internet, and so on. This research further suggests that the change of media markets significantly depends on the interrelation between new media technologies and older media. As shown in this study, if looking at the change of the movie market when the television and the VCR as new media technologies penetrated into mass media markets, it could be plausibly argued that the mutual adjustment between old media and new media is a important variable. For instance, whereas the television market took away its expansion from the movie market, the VCR did not. The VCR technology has increased a total media market instead of making a decline in other older media markets, which has occurred in Korea and the United States.

Increasingly, the new media are not simply a linear extension of the old. The common link between the two is the ability to offer information and entertainment resources to large audiences, conveniently and at affordable prices. The difference is that the new media can usually perform with better functions because they expand the range of resources and other capabilities dramatically (Dizard, 1994). According to the findings of this study, the introduction of new video technologies may have structurally changed media markets, by making consumers spend a greater proportion of income on this medium at the expense of other media markets or non-media goods and services. This is a second suggestion drawn by this study.

Third, at least during initial start-up of the VCR, although the new market increased at the expense of spending on more traditional media, the VCR, as time goes on, has attracted further consumer expenditures not previously spent on other media and has increased an overall income share of spending on the mass media. In other words, the VCR created the new consumer spending on the new medium and other mass media recovered their market sizes in the GNP, which was approved by comparing the different impact levels of short-term and long-term on other mass media markets since the advent of the VCR. Thus, it could be drawn from this study that the consumer expenditure on media has been, is, and will be expanding to a maximum level allowed by the income and time.

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Entrepreneurship and economics: Essentials of the media management course

by

Mary Alice Shaver
The University of North Carolina at Chapel Hill

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Entrepreneurship and economics: Essentials of the media management course

The media management and economics course is a fairly recent addition to the curriculum at many universities. Unlike advertising management, which has for years been taught in both business and journalism schools, or newsroom management, which has been a staple in many news-editorial sequences, the discipline of media management and its bedfellow, media economics, is a relatively new one. Yet it is an increasingly important area for students in all facets of journalism, whether or not they aspire to management roles in their own careers. Understanding the decision processes managers must go through and the constraints, both monetary and organizational, that affect day by day and long-term decisions can help students understand how to work within, understand, contribute and, if necessary, be change agents to the industry. How to get students, many of whom may not have had any direct industry experience, to understand and be able to discern problems and develop solutions is a challenge to the instructor. To add to the challenge, many of the students, particularly at the graduate level, come to the class with different levels of preparation due to other classes taken, experience in the work world or a combination of these factors.

The objectives of the media management and economics class may be stated as: 1) to understand how management decisions are made and to learn to evaluate choices and make realistic and workable decisions balancing long-term goals and short-term needs; 2) to evaluate priorities, solve problems and develop innovative and entrepreneurial solutions within the framework of the organization; and, 3) to understand how all aspects of the media business must come together to meet company goals of financial viability and service to all constituents. In order to understand management, students must have an understanding of the economics of the industry.

Meeting the challenge of moving from the stated objectives to the successful actual learning by individual members of the class requires providing each student with information in key areas that can then be used for problem solving in several differing categories. These include managerial functions (leadership, organization and planning), finance (budgets, allocation of resources), competition (audiences, marketing, advertising, competitive strategies including start-ups, new business and subsidiary publications), human resources (EEOC regulations, employee evaluations and attitude surveys, job satisfaction components and re-engineering of the newsrooms and the company), marketing concepts, mergers and acquisitions and using research to inform management decisions.

Organizing components

In the class I teach, I also use a set of central or organizing questions each semester that bridge the individual key areas and move to industry-wide concerns. These may change from year to year. Examples of this type of question are: What is the role of new enterprise and subsidiary publications in today's newspaper environment? How do government regulations and policy affect management decisions? (This one proved particularly useful in the broadcast area recently.) What is the role of management in the re-engineered media work place?

The basic readings, lectures, discussion and case analysis comprise an important part of the class. Depending upon whether the class is at the undergraduate or graduate level, there may be in-class and take-home exams (undergraduate), written case analysis (both undergraduate and graduate) and a final, conference quality paper (graduate). At least part of each week's work is readings, a case and discussion.

However, there are also three special assignments that involve students in an intensely participative way and that both complement and extend the understanding of the problem solving and decision processes inherent in all management jobs. While each may be used alone, together they work to incorporate realistic economic precepts and in-depth understanding of both case development and presentation skills. These assignments are complementary rather than cumulative. Each teaches at least one area of the subject matter. Regular reading and lectures continue as part of the class work throughout the semester, so each of these three assignments may be used as one or more a complete classes or as an on-going part of several classes. This works whether the class is a three-hour once a week class, such as the one I usually teach, or meets more frequently during the week. For classes that meet more often, one day a week may be devoted to the task work while the other day or days is used for the regular format.

These assignments foster discussion that is involving, interactive and directed toward a common problem-solving goal. Yet each is different: The first brings the class together as a team in an entrepreneurial effort; the second merges the content from individual reports into an overall understanding of financial concepts in a way that is less threatening and more meaningful to students than just a presentation of a profit and loss statement; the third promotes the ability to understand a situation and its inherent management problems well enough to explain them to a group and to lead a problem-solving discussion based around key questions.

Starting a media business from scratch

The first day, the class is given a "consulting" assignment which asks them to investigate what would be needed to start a weekly paper (some semesters, it is a radio station). Using the newspaper as an example, the exercise is posed as follows:

"I would like to start a weekly paper in my area and have $200,000 to spend. I might be able to raise a bit more if necessary. However, I know absolutely nothing about newspapers and need to you tell me what I will need and how much it costs. The town where the paper will be started is the county seat. The county itself has a daily paper which publishes in another town, but circulates throughout my county, and two weekly papers, one of which is owned by the daily and actually published in the town where I want to do the start-up. My paper is projected to be a weekly, 52 weeks a year, 12-pages and have a 2500 press run per week. A store-front location can be rented at $500 per month."

The first problem the students must figure out is what is required and how much it will cost. The class is not given any guidelines at this point, but may spend part of the class discussing what is needed or may bring a "laundry list" the next week. Basic areas that must be accounted for include printing (on or off site, buy or lease equipment or take it out camera ready for job printing), supplies, equipment (office, computers, cameras, darkroom, other), personnel (how many and in what roles), basic operating costs (paper, cartridges, telephone, water, rent, electric), personnel costs (salaries, social security, health insurance, Workers' Comp), insurance (including libel) and professional memberships, travel costs to cover stories. While finding costs, the class must also make decisions. As costs and decisions are made, a real model of an actual start-up is discussed and class decisions are weighed against the actual case --- but not until some class discussion and decision-making has ensued. Then, decisions about how to circulate the paper (mail or boxes), how to market the paper, and how to set ad rates must be made. In each of the these last decisions, consideration must be given to the competition and their rates and circulation. A pro-forma with projections for five years, taking into account additional costs for increases in salaries and repair or replacement of equipment, is developed. Finally, a set of three resumes are provided for consideration. From these, the class argues relative merit and need and chooses one candidate as the editor.

By working in groups or assigning individuals to investigate one or two areas in the beginning, the information can be gathered in the space of a couple of weeks. The entire project can take two or three weeks or up to half the semester, depending upon what is wanted. (See Appendix A.)

Understanding financial parameters

Value-line or annual report assignment. For this assignment, each student chooses a different publicly owned newspaper group and gets a print-out from Value Line or an annual report for their chosen group. To go along with this, students are given a copy of a valuable booklet provided by Merrill-Lynch and titled, "How to Read a Financial Report." (These are available from any Merrill-Lynch office; Merrill-Lynch also allows the booklet to be copied for class use if they cannot provide enough.)

Using this material, each student gives an in-class report on the group, including profit and loss, new ventures, divestitures, other holdings (such as broadcast or other properties), stated goals, geographic disbursement and any other area that seems to be pertinent and provides the class with a profile of the company. A discussion about the similarities and differences among the companies follows the presentations. This assignment is useful because it introduces the financial area using actual data and the context of the organization's other behavior throughout the year. Along with this, a profit and loss statement from a broadcast organization is examined so that differences in categories of expenses may be examined.

A good supplement to this work may be found in the Newspaper Financial Executives Journal, which addresses the concerns of financial officers and illustrates the breadth of that field.

Individual case development and presentation

The third assignment in the class is to develop a case along with questions and then lead that case in the classroom. This assignment, which is due half-way through the semester, must be based on some managerial aspect covered in the class readings (or on some tangential area with permission of the instructor). Further, it must present a real problem for class discussion. Questions must be provided for the class. Depending on the student and the case, cases are often actual work experiences, disguised in some way, so that the presenter can disclose the decisions made and the class can compare its conclusions and recommendations and the actual outcome.

Not only does this provide the class with new and interesting cases from the actual working world, it also teaches each student how difficult it is to present new material to a group and to lead a discussion of the material in a problem-solving situation thereby giving a practical application to the leadership and motivation theories that have been a part of early semester class discussion. In my class experience, students who have little work experience can still find a way to succeed in this assignment by adapting some non-media experience or by using some actual industry event. This assignment works extremely well in smaller classes, although it can be a group assignment for larger classes. Each student receives a copy of the case and questions the week before it is to be presented. In my class, the case discussion section of the class uses these student-generated cases for the last few weeks of the semester. Using two per session works well.

In the graduate class, individual case presentations begin soon after mid-term, allowing time for the final research paper presentations during the last two weeks of the class. There is no other final exam for graduates. Undergraduates typically need more time to pull the individual cases together, particularly if they are group projects, so the presentations begin later. This works, since there are no final paper presentations in the undergraduate format; there is a final exam.

The final assessment

Assignments such as the ones described in this paper involve students in very realistic problem-solving activities while providing them with information about important aspects of the management process. The decision processes inherent in the entrepreneurial assignment not only involve students from the first session of the semester, but also illustrate a key management principle. The second assignment furthers involvement while teaching financial concepts and understandings from actual industry data. The third, individual case development, is the capstone. It brings together information seeking, analysis, problem solving, organization of material and presentation into one assignment. Developing questions and leading the discussion provides each student with experience in conducting meetings and in presentation. Taken as a set, these three assignments extend the class reading and case discussion background in an interactive manner that both interests and involves students well beyond the usual class format.

Wage Stabilization and the Daily Newspaper Commission In World War II

by

Mary Alice Shaver

and

Anthony Hatcher

The University of North Carolina at Chapel Hill

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Wage Stabilization and the Daily Newspaper Commission in World War II

Following a period of increasing prosperity and power for big business during the period following World War I, the crash of 1929 brought a new focus on organized labor as workers looked to both the government and organized labor for both protection and security. The 1930s brought new strength and support to the labor movement. Membership grew throughout the period, and the passage of the Wagner Act and the formation of the new National Labor Relations Board in 1935 provided a new importance and legitimacy for organized labor. It was in this climate of labor solidarity and strength that the country entered World War II. The War effort brought a severe and immediate need for both stepped-up production and manpower which, together with shortages of both raw goods and available workers served further to strengthen the position for the organized labor. While the government's wartime policy provided for maintenance of contract clauses for union membership, it ultimately also placed restrictions on wage increases and called for a no-strike policy.

When the National War Labor Board, an arm of the National Labor Relations Board, was created in 1942, its mission was to be an impartial arbiter of disputes between management and labor during World War II. This mission was altered soon after its inception when the War Labor Board was given the additional responsibility of enforcing a nationwide wage freeze.[1] Under what was called the "Little Steel Formula," a decision that had been ruled on by the NWLB in July of that year, "wage increases were not to exceed 15 percent of rates in effect on January 1, 1941." This became known as the "15 percent rule." Most union workers had received large salary increases in the spring of 1941, so the intent of this ruling meant that few wage hikes would be given for the duration of the war.[2]

The decision did not dissuade workers from trying to get raises, however, just at the United States Government's no-strike policy during the war did not prevent strikes from occurring. All industries were affected by wage stabilization rules; those that were considered to be "essential" industries had specific commissions which ruled on labor disputes. Newspapers were considered an essential industry as the public was dependent upon them, along with radio, for essential war news, opinion, and the publication of governmental policy and the text of important speeches. Newspapers played an essential role in maintaining the both the flow of information and public support for the war effort.

As did other industries, newspapers had their share of difficulties over wages and with strikes during wartime, and the Daily Newspaper Printing and Publishing Commission was established in February 1943 (operating first as a panel acting upon some cases and referring others to the Sixth Regional War Labor Board and amended to full Commission status with broader powers in February 1944) to arbitrate disputes within the industry.[3] This Newspaper Commission joined several others established to arbitrate wage allocation in other key industries. These included shipping, meat packing, lumber, telephone, tool and die, construction and trucking. The formation of a specific commission to arbitrate newspaper wage disputes recognized the daily newspaper industry as an "essential" industry in time of war.

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[1] Foster Rhea Dulles, *Labor In America: A History,* 2d revised ed., (New York: Thomas Y. Crowell Co., 1960), 108; Public Law 729, 2 October 1942.
[2] Ibid.

The purpose of this paper is to examine the role of the Newspaper Commission and its activities during this time of national emergency and to place them in context following the formation of the National Labor Relations Act of 1935 and preceding the Taft-Hartley Act of 1947. It is important to note here that the NLRB Act was an attempt to equalize bargaining positions between labor and management by encouraging collective bargaining and protecting the right of workers to organize.[4]

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[3] Frederick S. Deibler, "The Daily Newspaper Printing and Publishing Commission," *The Termination Report of the National War Labor Board: Industrial Disputes and Wage Stabilization in Wartime,* vol. I, (Washington: U.S.G.P.O., 1945), 1180.

[4] "The Labor-Management Relations Act of 1947," *Illinois Law Review* 42 (September-October 1947): 445.

Need for a separate commission

In justifying the establishment of a separate commission for newspapers, Commission Chairman Frederick S. Deibler wrote:

> The industry was not engaged in war production in the sense of an ammunition plant, yet it was declared to be an essential industry. It was specifically exempt from the 48 hour provisions that were applied to war industries generally. In addition, the industry was free from any form of price control, either of the price of papers or of the advertising rates, the two sources of revenue in the industry. Aside from the general manpower shortage, the chief war-time problem of the industry was the shortage and rationing of newsprint.[5]

Newspapers were identified as differing from the general manufacturing industries in two important ways: 1) producing a highly perishable product in which everyone involved in its production had to meet strict deadlines and 2) a lack of competition within the industry except on the local level in the instances where there were two or more papers produced in the same city.

Noting that the "competitive factors normally found among manufacturing plants whose products are sold on a competitive market behave differently in this industry," the Commission concluded that "Many of the wage problems were peculiar to the industry."[6] The end product of the newspaper business was a different product every day, which meant that decisions regarding the product had to be made on a daily basis. Further, the workers on the daily newspaper included a wide range of professions, education and skills and involved several different kinds of unions all contributing to the production and delivery under deadline pressure. Any commission arbitrating labor problems would have to have an in-depth understanding of the process, balance of skills required and deadline pressures. Because of this different nature of the newspaper industry, it was deemed more suitable to have one central commission to deal with newspaper labor problems, rather than adhering to the regional format of the commissions that dealt with other essential industries. In forming the Commission, attention was paid to the long years of collective bargaining between the various mechanical units and the publishers, the record of published wage scales, the procedures already negotiated for resolving differences and the feeling that sensitivity to historical precedents would be better observed by one central body rather than the twelve regional wage boards in place across the country. The Commission was set up in response to a joint request by the American Newspaper Publishers Association along with several newspaper unions, including the International Typographical Union, the International Printing Pressmen, the International Photo-Engravers Union and the International Stereotypers and Electrotypers' Union of North America.[7] Following an initial

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[5] Deibler, 1180.
[6] Ibid., 1194.

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[7] Ibid., 1180.

90-day experimental Panel, the Commission was established and was comprised of a pool of 37 labor representatives, 39 industry representatives and 4 public members. Of these, approximately two-thirds actually served on a hearing board for one or more cases.[8]

Concerns about division of labor

Perhaps the most unusual factor concerning wages at daily newspapers had to do with the division of labor. The Commission saw it divided into two distinct areas. On one side were the mechanical craftsmen involving the trades of typography, stereotyping, photoengraving, press operation, mailers, and paper handlers. On the other side were the editorial and business workers, consisting of editors, reporters, accountants, salespeople, secretaries, circulation workers, and maintenance staff.

The two highest costs for a newspaper were for newsprint and wages. Yet two papers with the same number of staff members and the same number of pages each day might have dramatically different circulations, which would affect newsprint costs.[9]

Each of the craftspeople was represented by a specific union. For example, the composition department workers were represented by the International Typographer's Union. Union representation was new, less well defined, and less consistent for the editorial and business side of the industry. The American Newspaper Guild, begun in 1933, covered approximately 18,000 to 20,000 daily newspaper employees. On some newspapers, the ANG would bargain only for the editorial department, while on other papers the Guild would also include advertising, circulation, and maintenance employees.[10] Because of the complexity of the daily newspaper operation, there could be as many as seven to ten labor groups involved in any dispute.

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[8] Ibid., 1196.
[9] Ibid., 1194.

These two broad divisions of labor had their own wage structures as well. Union wage scales were fairly uniform for mechanical workers at the estimated 1,800 daily newspapers in the country at the time. Within a given city, workers at various papers received roughly the same amount of pay for their position. For the editorial and business departments, there was a contract minimum hiring rate and an actual rate for those with seniority. Individual bargaining was permissible within the editorial ranks, and depending on the size of the paper, pay rates for reporters, even in the same city, ranged from $25 a week to above $300 per week.[11] The Commission determined that for this group it "could not stabilize actual rates. These differences had been of long standing and represented an estimate of the relative worth of different reporters."[12] In short, now only did a variance in scales exist between the two main classifications of newspapers workers, but there was a major pay disparity on the editorial side.

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[10] Ibid., 1182-3.
[11] Ibid., 1183-4.
[12] Ibid., 1187

Further complicating matters, some craft workers were being paid on a piece rate system as late as January 1941, the reference point for the 15 percent rule. Whenever the craftspeople who had been paid on a piece rate system in 1941 requested a wage adjustment from the Newspaper Commission after 1943, the formula became problematic. When adjustments were made, some workers within the same plants could have been paid at radically different rates. The Commission chose to exclude the earnings of piece workers in calculating the 1941 basic wage. With a few exceptions, maladjustments among craft workers were dealt with using the scale rate in effect on January 1, 1941.[13] As mentioned above, editorial and business workers were not paid a uniform scale rate. For wage adjustments in this group, "the straight time hourly average as of January 1, 1941, would be used as the basis for calculating the maladjustment allowance in any particular case."[14]

And although the formation of the Commission was agreed upon by both the publishers organization (ANPA) and the key union organizations present in daily newspapers, the relationship between management and unions was complicated by the inherent belief of management that unions should not interfere with the business function of the newspapers.

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[13] Ibid., 1185.
[14] Ibid., 1186.

According to management, the role of keeping the individual newspaper businesses viable belonged entirely to the management side.[15]

An important pre-War Supreme Court decision

A key consideration was a decision made by the National Labor Relations Board in 1936 and upheld in 1937 by the U.S. Supreme Court. This case involved the formation of the Associated Press unit of the New York Newspaper Guild and the subsequent discharge of Morris Watson, organizer and first chairman of the unit.

The Associated Press claimed that the interstate nature of its work in foreign and domestic news flow meant that the cessation of work would "seriously impede if not prevent the issuance of newspapers in all parts of the country." At issue were the appropriateness of the Associated Press Unit as a local collective bargaining unit and the claim of Morris Watson that he had been discharged because of his organizing conduct. The NLRB found that the New York Associated Press Unit met the conditions for becoming a collective bargaining unit and issued a cease and desist order regarding discouraging membership in any labor organization by its employees. It also ordered the reinstatement of Watson, judging that he had, indeed, been dismissed because of union activity and not because of failure to discharge his duties in a satisfactory manner. The Associated Press appeal of this ruling ultimately reached the Supreme Court which upheld the NLRB ruling. However, the Court also specifically upheld the right of the AP to discharge any employee who failed to comply with its policies, but not for discharge because of union activities. The Supreme Court ruling in this case further stated: "The business of the Associated Press is not immune from regulation because it is an agency of the press. The publisher of a newspaper has no special immunity from the application of general laws. He has no special privilege to invade the rights and liberties of others."[16]

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[15] Constance Williams, "Note on Management Prerogatives," *The Termination Report of the National War Labor Board: Industrial Disputes and Wage Stabilization in Wartime*, vol. II, (Washington: U.S.G.P.O., 1945), 623.

It was within this balance of the industry as an essential business, the often conflicting convictions of both management and unions of their respective roles in the industry, the wage and labor complexities inherent in the daily newspaper industry, the history of collective bargaining by the mechanical unions and the climate of the Associated Press decision that the NWLB Daily Newspaper Commission began its wartime work.

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[16] 301 U.S. 103, 81 L. Ed. 953, 57 S. Ct. 650.

The work of the Commission

Much of the work of the Daily Newspaper Commission was relatively routine, involving voluntary wage adjustments that fell under the "Little Steel Formula" and so were easily decided. However the Commission (and before full status, the Panel) also settled disputes between publishers and unions and between unions themselves. The Commission functioned as a board of arbitration; its rulings could be appealed to the NWLB itself. Three cases are of particular interest as are a resolution pertaining to the International Typographers Union (ITU) and a procedure for dealing with an entire group of cases brought by the Newspaper Guild on behalf of 21 individual newspapers.

The first case is that of the *New York Herald Tribune* and the Newspaper Guild of New York. Heard in March, 1943, the issue concerned a wage increase arbitrated by the Commission. The case was one in which classifications of job descriptions and wage minimums were set. In this case, the *New York Herald Tribune* protested the wage awards given and brought the matter forward again claiming that the wage adjustments were "incompatible with the national economic stabilization program."[17]

The full National War Labor Board agreed to hear the complaint only on the issue of a possible unstabilizing effect in terms of a general wage increase. In re-examining the case, the NWLB found a situation where the majority of the employees in question had been working for the company as of January 1, 1941 and that 118 of 248 employees had received an average pay increase of 21 1/2 percent while the remainder had received no increases at all. In making a wage adjustment, the arbitrators had mandated an increase to the remaining 130 employees which averaged more than 18 percent. The maladjustment figure in excess of the Little Steel Formula of an allowable 15 percent was the crux of the management complaint. The NWLB found that the arbitrators had taken the company practice of individual rather than general wage increases into account and further, had put the excess wage adjustment into the category of merit raises. The NWLB took into consideration that a shortage of manpower might have led to additional responsibilities and found this to be acceptable. Thus it upheld the wage award by the Commission and found against the *New York Herald Tribune*.

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[17] "In the Matter of New York Herald Tribune, New York, New York and Newspaper Guild of New York," 10 March 1943, Case no. 591, *Termination Report*, vol. III., (Washington: U.S.G.P.O., 1945), 789.

A second case of particular interest is that of the Printers League Section of the New York Employing Printers Association and the New York Typographical Union. The issue in this case was a contested minimum wage rate for compositors which had been granted in response to a wage contract request of the 15 percent allowable under "Little Steel." The Board referee had recommended an eight percent raise, a number the unions contested. In reviewing this case, the Board considered the relatively high amount of the wages, but stated that that alone would not be enough to disallow the full 15 percent requested. However, it noted that there were precedents for granting less than the 15 percent and that these were based upon the unstabilizing effect that increasing already high wages considering the wage standard within the geographical area. The Review Board recognized the compositors as a collective bargaining unit. It noted, however, that to give the full 15 percent would place the New York compositors well above the national average. The majority of the Review Board aligned with the initial Board of Arbitration in giving less than the full 15 percent wage increase. There was, however, a dissenting opinion by the labor members of the Review Board which stated that the level of wages should not matter and that, considering costs of living and obligations of the member, the full award should have been given.

A third case, that of the *Harrisburg Patriot* and the Harrisburg Newspaper Guild, raised the matter of maintenance of membership in a collective bargaining unit. The company's claim that doing so would abridge freedom of the press is the issue that came before the Review Board for consideration. The maintenance of membership clause had been developed by the War Labor Board. Simply stated, it allowed any employee a 15-day period after employment in which to decide whether or not to join in a collective bargaining unit. If the employee joined, membership had to be maintained during the contract period. Before each contract, the employee was once again given an option. Should the employee resign from the union during the contract period, resignation from the job itself was mandatory. *The Patriot* claimed that it could lose valuable people and that press coverage could be impeded by the continuance of this clause. Citing the Associated Press case of 1937, the majority decision was that the maintenance of membership clause did not interfere with freedom of speech. The case was remanded to the Newspaper Commmission which wrote a concurring opinion by the labor and public members and a dissenting opinion by industry members who claimed that the editorial employees in question "cannot not help but feel certain restraint in his writing, if he must maintain good relations with the union or lose his job."[18]

A special resolution was adopted to deal with the 1945 refusal of the International Typographical Union to bargain and its claim that members its assertion that its laws allowed it to walk out of arbitration proceedings with three Birmingham, AL newspapers. Further, the ITU claimed that it would not work except under terms and conditions it found satisfactory in terms of both pay and work hours.

In its special resolution, the National War Labor Review Board found that the ITU had "challenged the authority of the United States in time of war.... It persists in this policy despite the fact that newspapers are a vital and indispensable part of our wartime economy."[19] The Board ordered immediate resumption of publication. More than 20 ITU cases were given to the Commission in the first half of 1945; however, in July the Board ordered the Commission to stop processing ITU cases (as a means of putting pressure on the unions). The ITU, however, won many demands due in part to its continued strike calls and in part to the end of the War itself.[20]

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[18] "In the Matter of the Patriot Company and Harrisburg Newspaper Guild, Local No. 16, CIO," 9 March 1945, Case no. 111-927-D, *Termination Report*, vol. III, (Washington: U.S.G.P.O., 1945), 806-7.

Finally, in 1945, the Commission considered a request by the Guild to consolidate all pending wage disputes at 17 newspapers into one case and the three wire services cases into another and to request the National Labor Relations Board to hear both consolidated cases. The Board, however, requested that the Newspaper Commission look at them and refer these cases for further collective bargaining and, at its discretion, decide whether to consolidate any or all of the cases or to refuse to do so.

The Commission operated for a period of 32 months and handled nearly 7000 voluntary and 243 disputed cases.[21] Sixty-two strikes occurred during this period; forty-eight of them brought by the ITU. Between ten and fifteen of these were brought to the Commission. The dictates of the National War Labor Board stated that no hearings could take place during actual strikes; cases where there was no strike resolution following arbitration were brought before the Disputes Division. Given limited authority and lacking a compliance division, much of what was accomplished was through cooperation of the publishers and unions.

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[19] Ibid., 809.
[20] Deibler, 1192.
[21] Ibid.

The Commission was dissolved at the end of 1945. Although the work of the National War Labor Board and the Commission was "singled out as a positive factor in American wage structure" and although the efforts were cited for bringing inefficiencies to light, much of the compliance and agreement by labor was, in retrospect, an artifact of war conditions.[22] Although the charge to the Commission was to arbitrate labor and wage problems during a time of national emergency and was not meant to extend beyond the war period itself, the disputes brought to arbitration were illustrative of the unresolved issues, tensions and power struggles between management and labor within the newspaper industry. On the one side, the intent of management to keep the business and craft sides of the industry separate was clear. On the other, the power of the unions, essential throughout the entire production stages, and the resultant vulnerability to strikes that could threaten the existence of individual newspapers was obvious. The war period and the work of the Commission offered an example of the continuing need for arbitration and resolution within the industry. The composition of the Commission with representation from both sides and from the public was a model unique to the emergency situation at hand and represented a governmental interference in labor negotiations that neither side would easily accept under other conditions. The continued challenges by the unions, particularly the ITU, even under wartime conditions was a precursor to the problems that would erupt at the end of the War.

A wave of strikes hit the country in the immediate post-war years and these included several within the newspaper industry. The scope of union power was largely untested and unresolved. This, then, was the background and climate awaiting management and labor in the period of time just prior to the Taft-Hartley Act of 1947 and the subsequent rise of membership in unions associated with the newspaper industry that peaked in the 1950s.[23] Further research will focus on the relationship between unions and newspapers in this immediate post-war period and the changes in the industry that were the result.

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[22] Sar A. Levitan, *Ingrade Wage-Rate Progression in War and Peace: A Problem in Wage Administration Techniques* (Plattsburg, N.Y.: Clinton Press, 1950), 99.

[23] Elizabeth A. Fones-Wolf, *Selling Free Enterprise: The Business Assault on Labor and Liberalism 1945-60* (Urbana: University of Illinois Press, 1994), 2.

Newspaper Stocks And Stock Market Indicators:

A Comparison and Analysis of Means of Tracking Performance

Regina Lewis, Ph.D.
Department of Advertising and Public Relations
University of Alabama
Tuscaloosa, AL 35487-0172
Phone: (205) 348-3592
E-Mail: lewis@apr.ua.edu

and

Robert G. Picard, Ph.D.
Department of Communications
California State University, Fullerton
Phone: (714) 278-2640
E-Mail: rpicard@fullerton.edu

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Newspaper Stocks And Stock Market Indicators:

A Comparison and Analysis of Means of Tracking Performance

As newspaper firms increasingly turn to stock markets as sources for capital, questions are being raised about that public ownership and related behavior and the effects of these factors on the content and activities of newspaper firms.

Before the 1960s, only a few firms had gone public, that is, placed their share for sales on stock markets. In the last two decades, however, nearly every major newspaper firm has selected that means for raising capital either to fund internal activities or as a means of ending or reducing family ownership (Table 1).

After they went public, investment firms began analyzing and issuing reports on individual firms and by the 1980s began regular analyses of the newspaper industry as a whole. These reports were done to provide background for investment decisions. In the mid-1990s, the Newspaper Stocks Report newsletter began publication, tracking the performance of newspaper stocks separately from other stock categories. It did so using two indicators: the NSR Average and NSR Price Index (Newspaper Stocks Report).

Although investors have watched the developments with interest, the youthfulness of newspaper stocks has not yet produced many significant inquiries into the nature of newspaper stocks, how they perform overall, how they compare to other categories of stocks, and how various stock relate to traditional and newspaper stock indexes. Because of differences in the way stock indicators are constructed and calculated and the types and number of stocks included, their relations to specific types or groups of stocks and to specific companies varies. This paper explores the nature of newspaper stocks and the nature of market indicators, and then compares the performance of newspaper stocks and newspaper stock indicators against those of broader market indicators to gain a better understanding of similarities and differences between newspaper stocks and stocks overall and which indicators are most appropriately used when considering newspaper stocks as a group and individually.

The Nature of Newspaper Stocks

Newspaper stocks can be categorized, in terms of the traditional classifications used on Wall Street, as "cyclical." Cyclical stocks are defined as stocks that are not recession resistant, and typically are strongly affected by the business environment. According to Mittra and Gassen (1981), "When patterns in the economy are favorable to their industry, the earnings of cyclical companies peak. When the course of the economy changes direction, they suffer earnings setbacks and adversities" (p. 24).

Table 1
Going Public
When Newspaper Company Shares Began Trading

Before 1960		
		Dow Jones & Co.
	1938	Times Mirror Co.
1960s		
	1967	Gannett Co.
	1969	Knight Newspapers Inc.(merged with Ridder Publications in 1974 to form Knight-Ridder Inc.)
		Ridder Publications Inc. (merged with Knight Newspapers in 1974 to form Knight-Ridder Inc.)
		Lee Enterprises Inc.
		New York Times Co.
1970s		
	1970	Media General Inc.
	1971	Washington Post Co.
	1972	Harte-Hanks (privatized 1984)
1980s		
	1981	A. H. Belo Corp.
	1983	Tribune Co.
	1986	Pulitzer Publishing Co.
	1988	McClatchy Newspapers Inc.
		E. W. Scripps Co.
	1989	Central Newspapers Inc.
1990s		
	1993	Harte-Hanks Communications
	1994	Hollinger International (American Publishing Co.)
	1996	Providence Journal Co.

The performance of newspaper stocks depends on multiple factors. These include, for example: advertising volume (retail, classified and national), subscriptions and single copy sales, newsprint prices and other cost trends, promotional spending patterns, labor relations, capital spending patterns in the industry, the availability of cash flow for multimedia investment, publisher's cost-cutting moves (which can result in operating leverage), and consolidation in the industry (Reilly, 1996; Knecht, 1996; Nordby, 1994; Garneau, 1995; Rublin, 1994; Rublin, 1993). Obviously, these factors are influenced positively and negatively at various points by larger economic and environmental concerns.

Newspaper stocks respond to recessionary economic climates. They performed extremely well during the early 1980s, when retail spending was high. However, the newspaper industry underperformed the broader market for several years following the 1987 market crash, and was one of the last market sectors to rebound after general economic recovery occurred (Rublin, 1993). During the 1990-1991 recession in the newspaper industry, the financial performance of larger firms and less diversified firms were more adversely affected and larger firms had a more difficult time recovering from the recession (Picard, 1996).

Since the end of the recession, Wall Street analysts at times have been infatuated with newspapers stocks, and at other times have viewed them less favorably. Newspaper stocks lagged behind the market during most of 1994, as a result of a run-up in newsprint costs. However, as of January 1995, stock analysts were betting that the newspaper group had become undersold. They viewed regional chain and small-town newspaper stocks as particularly good investments, due to their advertising monopolies and their consolidation options (Peers, 1995). In June 1996, top-ranked analysts continued to favor newspaper stocks, but on more of a special situation and niche player basis (Knecht, 1996).

Because of differences in media business mixes, geographical economics and management conditions, market analysts recently have tended to view some newspaper company stocks as "hot" while taking a cooler attitude toward others (Knecht, 1996; Rublin, 1993). Some newspapers are considered "deep cyclicals" within the newspaper group (Rublin, 1993). However, analysts also have indicated that newspaper stocks tend to move as a group (Nordby, 1994; Rublin, 1994; Rublin, 1993).

Newspaper stocks have been shown to be of great interest to institutional investors, which now have majority ownership of about half of the publicly traded newspaper companies (Picard, 1994) and there is evidence that public ownership has effects on the behavior and financial performance of public companies (Blankenburg & Ozanich, 1993; Busterna, 1988; Meyer & Wearden, 1984).

Although market analysts often have compared overall newspaper stock performance to that of Standard & Poor's and other broad stock market indicators in assessing newspapers' attractiveness to investors (Peers. 1995; Welling, 1993; Rublin, 1993), academic researchers have not directly compared newspaper stock averages to other market indicators. McChesney (1987), in an investigation of the effects of the Watergate scandal on newspaper wealth, regressed returns data for an equally-weighted portfolio of newspaper stocks on the return to an equally-weighted market portfolio and on a dummy-coded Watergate event variable. Other academic, comparative newspaper stock studies, however, appear non-existent.

Broad Stock Market Indicators

In order to consider the relationship between newspaper stocks and market performance, one must first understand the role, use, and limitation of broad stock market indicators. Several well-known stock-market indicators serve as summary measures of market behavior; that is, they serve the purpose of portraying historical stock price behavior, as well as providing an assessment of the direction stock prices are likely to take (Gayed, 1990; Lorie & Hamilton, 1973; Merjos, 1990). These market barometers provide information about the relative strength or weakness of the overall market, or the future health of business -- thereby guiding decisions about whether or not to invest in equities in the first place. The indicators also provide benchmarks against which investors can judge the performance of individual portfolios against different sectors or the general market (Merjos, 1990; Gayed, 1990; Mittra & Gassen, 1981). Finally, the indicators provide benchmarks against which the SEC requires that firms compare returns on their shares in corporate proxy statements (Lewellen, Park, & Ro, 1996). All often-used market indicators are based on what are believed to be representative lists of stock issues.

Although "average" and "index" often are treated as synonyms in market-related discussions, this is inaccurate. In the typical calculation of a stock market average, daily issue prices are added and divided by some sort of divisor. Averages may be unweighted, in that company importance is not taken into account. Typical averages are weighted, however, in that higher-priced stocks have greater effect than do lower-priced issues.

An index is created through the selection of an arbitrary base period. The average market value of shares is expressed as a percentage of their average value in that base period. Some market experts have said that stock market indexes represent more technically refined measures of stock price performance than do stock market averages, because indexes often involve precise statistical formulas that eliminate statistical weaknesses inherent to averages. However, because many traders believe averages are more sensitive to changes in the market, averages often receive more publicity than do indexes (Teweles, Bradley, & Teweles, 1992).

This study uses 9 indicators to measure broad market performance: AMEX Market Value Index, 3 Dow Jones Indexes (industrial, transportation, utilities), NYSE Composite, NASDAQ Composite, 2 Standard & Poor's indicators (S&P 500 and S&P MidCap), and the Wilshire 5000 Index. The factors involved in their construction and calculation are reported below.

The American Stock Exchange (AMEX) Market Value Index

The AMEX index is based on changes, or movements, in the aggregate market value of the approximately 800 common stocks and warrants listed on the American Stock Exchange (Teweles, Bradley, & Teweles, 1992). The value base of the AMEX Market Value Index (and each of 16 AMEX subindexes) is 50. Each issue is weighted by the number of shares outstanding; therefore, changes in the index represent a weighted average of price changes (Merjos, 1990).

Unlike other indexes, the AMEX indicator measures dividends paid on stocks, treating them as reinvestments (Teweles, Bradley, & Teweles, 1992). Therefore, the AMEX indexes reflect total return rather than simple price performance (Merjos, 1990).

Some analysts have contended the AMEX Market Value Index is heavily influenced by the performance of smaller companies' stock (Mittra & Gassen, 1981). Others, however, have said that although many small stocks trade on the American Stock Exchange, and its indicator tends to be more volatile than those driven by blue-chip stocks, the AMEX index is highly susceptible to the influence of a few large companies' stock performance (Merjos, 1990).

The Dow Jones Averages

There are several Dow Jones averages, which represent the overall performance of those securities included in their various calculations. The Dow measures, because they are averages rather than indexes, are somewhat unique among market indicators (Butler & DeMong, 1986).

The Dow Industrial Average, which measures the stock performance of 30 leading manufacturing and service companies, is the oldest and most widely quoted measure of market behavior. The 30 issues tracked by the Dow Industrial are considered representative of the broad market -- not only because they represent blue-chip, large-company shares that are widely held by investors, but also because those 30 issues included in the Dow Industrial represent approximately 20 percent of the market value of all stocks traded on the New York Stock

Exchange. While it still is known as the "Dow Industrial," this arithmetic average has been altered to include financial, service and raw-material oriented companies (Gayed, 1990). Companies included in the Dow Industrial include American Express, McDonald's, Boeing and General Electric (Merjos, 1990).

While the Dow Industrial Average often is used to judge the direction of the whole market, other Dow Jones averages monitor certain sectors of the economy (Gayed, 1990). There are three Dow averages besides the Industrial: the Dow Transportation Average, which reflects the prices of 20 trucking, airline, air-freight and railroad company stocks (such as Delta Airlines and Federal Express); the Dow Utility Average, which reflects the prices of 15 electric and gas utility stocks (such as Consolidated Edison and Pacific Gas and Electric); and the Dow Composite Average, which serves as a combination of the other three to reflect the stock-price performance of all 65 entities included in the industrial, transportation and utility averages (Merjos, 1990). Given that the Dow Industrial is considered a barometer of activity in the manufacturing and service sectors, and the Dow Transportation is considered a barometer of distribution activity, the Dow Composite may be considered an indicator that reflects activity on both fronts. It is considered the most accurate of the Dow averages, because it covers a broader market spectrum (Gayed, 1990).

The Dow averages are not true averages. They are adjusted, through the use of divisors, to take into account potential distortions caused by stock splits. For example, if the total price of the 30 Dow Industrial stocks was 1500, the average might be considered to be 50. However, if one of the stocks underwent a 3-for-1 split, and its price dropped from 90 to 30, the 30-stock total would fall to 1440 and the average would fall to 48. This would be misrepresentative, because the true stock values of the 30 issues never changed. To account for such market activity, the Dow Industrial divisor periodically is changed. In the case described, for example, it would be changed from 30 to 28.8 (Butler & DeMong, 1986; Merjos, 1990).

The Dow Industrial divisor has been adjusted many times over the years, due to splits, mergers and substitutions in companies included in the average. Typically, it has been forced lower, and it now has a value of less than one (Gayed, 1990). This downward movement in the divisor has resulted in high index volatility given fairly small changes in the stock prices of its components (Merjos, 1990; Gayed, 1990; Merrill, 1984).

Because of this volatility, the Dow receives a fair amount of criticism from those who note that comments such as, "The Dow has plummeted" do not represent meaningful interpretations of events (Cohen, Zinbarg, &

Zeikel, 1982). The Dow averages also are criticized based on the fact that the equal weight attributed to each stock makes them "price-weighted;" that is, stocks that are more highly priced receive greater weight and have greater influence in the calculation of the averages than do lower priced stocks. The effect of this weighting system is twofold: 1) higher priced leaders such as Procter & Gamble and Eastman Kodak, if "heavy," cause an overall decline in the Dow Industrial despite advances in a majority of the components (Wachtel, 1977; Mittra & Gassen, 1981); and, 2) limited attention is given to those stocks that have undergone splits -- even though those companies likely are successful (Merjos, 1990; Teweles, Bradley, & Teweles, 1992; Merrill, 1984; Cohen, Zinbarg, & Zeikel, 1982). Critics of the Dow averages have suggested a change from price weighting to market weighting would improve Dow representation (Butler & DeMong, 1986; Lorie & Hamilton, 1973).

Other critics of the Dow have said the inclusion of AT&T stock, which typically has been high in price and relatively stable, has made the Dow Industrial average appear more stable than has been realistic. They have said those who rely on past performance of the market averages continue to be misled by AT&T's influence (Teweles, Bradley, & Teweles, 1992).

Still other criticisms of the Dow Industrial Average stem from the fact that because only 30 issues are included in it, any catastrophic event affecting only one company has strong impact on the overall indicator. It has been suggested even a modest increase in the number of issues included in the Dow Industrial would strengthen it (Butler & DeMong, 1986). Other problems cited relate to the timeliness with which changes in the Dow Industrial Average components are made. It has been accused of failing to reflect the proper pace of change in various industries (Butler & DeMong, 1986).

Lastly, even though the stated mission of the Dow Industrial Average is to serve as an indicator of blue-chip activity (Butler & DeMong, 1986), critics have noted that because of its blue-chip makeup, it cannot serve as a valid benchmark for typical stock issues (Merjos, 1990). The blue chips are not indicative of average portfolio performance, because under certain circumstances, low-priced stocks show distinctly different performance trends than do blue-chip stocks (Lorie & Hamilton, 1973; Mittra & Gassen, 1981; Teweles, Bradley, & Teweles, 1992). The Dow Industrial firms are low-risk, and riskier stocks often are the better market performers (Cohen, Zinbarg, & Zeikel, 1982). Also, the large research and development budgets of Dow companies make them less responsive to larger market movements than younger firms in newer areas such as high technology (Dalton, 1988). In summary, it has been suggested the Dow Industrial be used in conjunction with other indexes (Wachtel, 1977).

The New York Stock Exchange (NYSE) Composite Index

The New York Stock Exchange Composite takes into account all stocks -- over 1,500 -- that trade on that exchange. Four separate indexes represent finance, transportation, utility and industrial issues (Teweles, Bradley, & Teweles, 1992).

The S&P 500 and NYSE indexes differ only in terms of coverage (Lunn, Dunlevy, & Jackson, 1989). Like the S&P 500, the NYSE index measures changes in the aggregate market value of all included stocks, and is weighted by market value, or by multiplying the price of each stock by the number of shares of that stock listed (Teweles, Bradley, & Teweles, 1992) . Also like the S&P 500, the NYSE index is expressed as a percentage of average market value in a base period. The value base for the NYSE index is 50, and the base date is December 31, 1965 (Teweles, Bradley, & Teweles, 1992; Cohen, Zinbarg, & Zeikel, 1982). Adjustments are made to account for new listings, delistings and mergers (Merjos, 1990; Teweles, Bradley, & Teweles, 1992; Lorie & Hamilton, 1973).

The NYSE Composite Index is considered by many analysts to be the best indicator of securities trends (Gayed, 1990). However, although the NYSE Composite includes about 1,000 stocks not included in the S&P 500 measure, it has tended to follow the same pattern as the S&P 500. This can be attributed to the fact that the additional 1,000 issues are not weighted as heavily as the larger 500 issues (Wachtel, 1977).

The National Association of Security Dealers Automated Quotation System (NASDAQ) Composite Index

The NASDAQ Composite Index was created to describe over-the-counter market activity (Gayed, 1990), and it measures prices of approximately 4,250 domestic issues. The stocks included in computation of this index fall into one of the following categories: industrial, transportation, utility, bank, insurance and other finance. The NASDAQ index, like the S&P 500 and the NYSE indexes, is weighted by market value. It was assigned a value base of 100 as of February 5, 1971 (Teweles, Bradley, & Teweles, 1992; Merjos, 1990).

Although larger over-the-counter stocks have the greatest influence on movement of the NASDAQ Composite, NASDAQ issues are believed to reflect corporate life below the blue-chip level (Merjos, 1990). The

NASDAQ Composite is considered more indicative of small company activity than are the Dow Industrial, S&P 500 or the NYSE Composite indexes (Mittra & Gassen, 1981).

The Standard & Poor's 500 Index and MidCap 400 Index

The S&P 500 probably is the second-most quoted market indicator. It covers 500 stocks, including industrial, transportation, financial and public utility issues. Stocks are selected for inclusion in the S&P 500 based not on size, but rather on an attempt to achieve a distribution of industry groups that mirrors the distribution of those groups on the New York Stock Exchange (Merjos, 1990).

The S&P 500 index is based on the aggregate market value of included issues. The market value of the shares is expressed as a percentage of their average market value in the 1941-1943 base period, which has been given a value base of 10 (Merjos, 1990; Teweles, Bradley, & Teweles, 1992; Sheimo, 1989).

The S&P 500 is regarded highly by many technicians, because it includes a broad listing of stocks that represent approximately 80 percent of the market value of stocks listed on the New York Stock Exchange. It is weighted by the number of outstanding shares of each issue included, and, therefore, does not require adjustments for stock splits (Teweles, Bradley, & Teweles, 1992).

Many institutional investors, who believe the S&P 500 solidly represents the average common stock portfolio, use it to measure annual performance (Sheimo, 1989; Mittra, & Gassen, 1981). However, because the S&P 500 index is weighted by market value (number of shares outstanding and stock prices), a small number of the stocks included in its calculation dominate its behavior (Merjos, 1990; Butler & DeMong, 1986). Those companies listed in the Dow averages weigh heavily in the S&P 500 index (Lunn, Dunlevy, & Jackson, 1989; Sheimo, 1989). Therefore, the Dow Industrial and the S&P 500 tend to track fairly closely -- although the S&P 500 is less likely to be strongly affected by a single dramatic stock price change (Merjos, 1990; Sheimo, 1989).

The Standard & Poor's MidCap 400 Index consists specifically of medium-sized company stocks, which are included based on their industry group representation. Currently, it consists of 308 industrial stocks, 46 utility stocks, 34 financial stocks and 12 transportation stocks. Whereas the median market capitalization of S&P 500 stocks is approximately $3.4 billion, that amount for the S&P MidCap is approximately $930 million.

Like the S&P 500 Index, the S&P MidCap indicator is market-value weighted. The industrials account for slightly more than 70 percent of the market value covered. In terms of exchange representation, the S&P includes approximately 300 NYSE stocks and 100 NASDAQ stocks.

The Wilshire 5000 Equity Index

The Wilshire index covers the behavior of 5,000 stocks -- all NYSE and AMEX stocks, as well as those stocks in the over-the-counter market that are most active -- and represents a value of over $1 trillion (Teweles, Bradley, & Teweles, 1992). It is perhaps the most comprehensive of all market indicators (Dalton, 1988); however, because it is calculated in a similar manner as the S&P 500 and NYSE indexes (as a capital-weighted price index), it has been argued by some market experts that large companies have a significant impact on its swings. They have said its movements closely track the other major market indexes, despite its inclusion of a large number of small company issues (Merjos 1990). Other market experts, however, have contended that the inclusion of many stocks in the Wilshire 5000 reduces the influence of the blue-chip stocks to a noteworthy degree. The index tends to be more volatile than indicators that take into account fewer issues (Teweles, Bradley, & Teweles, 1992; Cohen, Zinbarg, & Zeikel, 1982).

Comparisons Among Broad Market Indicators

Although some market indicators may be better constructed than others (Merjos, 1990), no one measure has been superior in indicating market cycles. For forecasting purposes, no single market measure is considered most effective. The indicators have tended to move up and down in unison more than 90 percent of the time, and changes in direction typically have begun on the same day across averages and indexes (Teweles, Bradley, & Teweles, 1992).

Although market indicators tend to move in the same direction, however, all of the indicators "tell their own tale" (Wachtel, 1977, p. 22). Investors are advised to consider more than one indicator in deciding upon investment strategies, because indicators differ in rate and amount of movement (Sheimo, 1989; Mittra & Gassen, 1981). In the 1970s, for example, the Dow Industrial Average underperformed other market indicators, while the NASDAQ Composite and the Wilshire 5000 posted comparatively large gains. In the 1980s, however, when large capitalization stocks were outperforming more speculative stocks, the Dow Industrial outperformed other market measures (Merjos, 1990). Because the Dow Industrial is representative of "smokestack" America, and reflects the performance of well-established firms with extensive financial resources, it tends to be strong during mature bull markets even after small- to medium-firm stock has begun to decline. During the final stage of a bear market, the Dow Industrial tends to suffer a lower low than that suffered by broader-based indicators such as the AMEX and NASDAQ indexes (Gayed, 1990).

The Dow Transportation Average is particularly sensitive to the business cycle, because it consists of companies such as airline companies that directly are affected by economic growth and contraction (Gayed, 1990). The Dow Utility Average is particularly sensitive to changes in interest rates, because: 1) Dow Utilities companies tend to borrow heavily in the capital markets in order to expand and, therefore, easily are hurt when interest rates rise (Sheimo, 1989; Wachtel, 1977); and 2) the utility stocks often are chosen by investors who are attracted to their high dividend yields. When interest rates rise, these same investors switch to higher-yielding short-term instruments (Gayed, 1990; Sheimo, 1989). The Dow Utility Average also is sensitive to severe weather patterns, which affect power usage. Thus, numerous conditions may render the Dow averages unable to stand alone as indicators of broader market activity (Sheimo, 1989). Similarly, the performance of the American Stock Exchange Market Value Index in recent decades has been interpreted as reflective of its high concentration of oil and gas companies (Wachtel, 1977).

While Dow averages have been dominated by cyclical stocks, the S&P 500 has been dominated by growth stocks. The S&P 500 has been used, traditionally, as the benchmark against which money management performance has been weighed (Wachtel, 1977; Mittra & Gassen, 1981).

Broad stock market indicators have been used interchangeably as dependent regression variables by researchers interested in the effects of factors such as money supply changes and inflation on stock price (Lunn, Dunlevy, & Jackson, 1989). Other researchers have used market indicators interchangeably as dependent variables, based on the availability of their data, to examine prediction of stock prices based on mood variables (such as Barron's confidence index) and informed opinion variables (measured, for example, by secondary stock sales as a percentage of total stock sales) (Branch, 1976).

The interchangeability of stock market indicators in such studies, however, has been questioned. It has been concluded the market measures are not interchangeable for such purposes, and it has been suggested the selection of a market indicator for use in regression analysis "must be strictly based on the appropriateness of the index to the problem under consideration" (Lunn, Dunlevy, & Jackson, 1989, p. 25). Authors also have indicated, however, that the various indicators are more likely to be interchangeable when the time frame for analysis is a period when the movement of the stock market is fairly uniform -- such as during a consistent bull or bear market (Lunn, Dunlevy, & Jackson, 1989).

Market experts have suggested that in comparing any portfolio's performance with broader market performance, "the investor should attempt to select an average that is similarly weighted. For instance, a portfolio weighted heavily with blue chips should be compared against the S&P 500 or the DJIA, whereas more diverse portfolios, depending on the type of stocks held, might be compared to other indicators" (Mittra & Gassen, 1981, p. 110).

Newspaper Stock Indicators

Newspaper Stocks Report, which began tracking stocks in July 1994, created two indicators specific to the newspaper industry, the NSR Average and the NSR Price Index. These were both constructed in manners typical of the broad market indicators.

Newspaper Stocks Report (NSR) Average

The NSR Average is based on the mean closing price for companies with daily newspaper holdings traded on the New York Stock Exchange, the American Stock Exchange, and NASDAQ. Like traditional stock average indicators, it is a price-weighted arithmetic mean with a divisor adjusting for stock splits and additions and deletions of stock.

Newspaper Stocks Report (NSR) Price Index

The NSR Price Index is a price level index that expresses the aggregate value of closing prices for the stocks as a percentage of the aggregate base established July 1, 1994. The index is adjusted for stock splits and additions and deletions of stocks.

Approaches and Methods of this Study

Because the various stock indexes are affected by the stocks included in the indexes and some are dominated by particular economic sectors and differing sizes of companies, it is unknown which is most appropriate for tracking the performance of newspaper stocks, whether the Newspapers Stocks Report Average or Newspaper Stocks Report Price Index are improvements on the traditionally used indicators, and the degrees to which different firms conform with the performance of indicators and other newspaper stocks..

The purpose of this study, then, is to seek answers to the following research questions:

RQ1: How do the Newspaper Stocks Report Average and Newspaper Stocks Report Price Index correlate with other stock averages and indexes?

RQ2: What averages and indexes are most appropriately used for comparing the price performance of individual newspaper stocks?

RQ3: What newspaper stocks show price performance most like each other?

Data from a 2 1/2 year period, July 1994 though December 1996, were used in this study. It utilizes the weekly closing prices of the newspaper stocks and those of the Newspaper Stocks Report Average, the Newspaper Stocks Report Price Index, and nine well known market indexes (the American Stock Exchange (AMEX) Average, the Dow Jones Industrial Average, the Dow Jones Transportation Average, the Dow Jones Utilities Average, NASDAQ, NYSE Composite, Standard & Poor's 500, Standard & Poor's MidCap, and the Wilshire 5000).

Newspaper companies included in the study included all public companies that were traded throughout the 2 1/2 year period.

The data were subjected to correlation analysis to produce coefficients indicating the degree to which the sets of data considered moved together. Interpretation of the coefficients was based on the 5-level interpretative guide suggested by Guilford (1956): 1) < .20 slight correlation, almost negligible relationship; 2) .20 to .40 = low correlation, definite but small relationship; 3) .40 to .70 = moderate correlation, substantial relationship; 4) .70 to .90 = high correlation, marked relationship; 5) > .90 very high correlation, very dependable relationship.

Because various stock prices and stock indexes are affected by general economic developments, it was expected that there should be similarities in the movement of indexes and in the general response of newspaper stocks compared to other types of stocks. As a result, the author excluded slight, low and moderate correlations as providing meaningful explanations to the questions posed in this study.

NSR Indices Compared to Other Market Indicators

In order to determine how the Newspaper Stocks Report indicators and general market indicators are related--and the degree to which they are related (RQ1)--correlations were assessed among the various indicators. Both the NSR Average and NSR Price Index were considered and the following results were produced:

NSR Average

The NSR Average had the highest correlation with the NSR Price Index and its highest correlation with non-newspaper indicators was with the Wilshire 5000 index, the broadest measure of overall stock market performance. The NSR average was very highly correlated with all the indicators used, except with the Dow Jones Utilities with which it was highly correlated (Table 2).

NSR Price Index

The NSR Price Index had the highest correlation with the NSR Average and its highest correlation with non-newspaper indicators was with the Wilshire 5000 index, the broadest measure of overall stock market performance.

The NSR average was very highly correlated with all the indicators used, except with the Dow Jones Utilities with which it was highly correlated (Table 3).

TABLE 2
Correlation Between NSR Average and Other Market Indicators

NSR Price Index	.9977
AMEX	.9710
DJ Industrials	.9819
DJ Transportations	.9728
DJ Utilities	.8935
NASDAQ	.9873
NYSE	.9887
S&P 500	.9872
S&P MidCap	.9897
Wilshire 5000	.9916

TABLE 3
Correlation Between NSR Price Index and Other Market Indicators

NSR Average	.9977
AMEX	.9716
DJ Industrials	.9714
DJ Transportations	.9714
DJ Utilities	.8877
NASDAQ	.9835
NYSE	.9808
S&P 500	.9790
S&P MidCap	.9846
Wilshire 5000	.9851

Newspaper Stocks and the NSR Indicators

Because previous research about stock indicators has indicated differences in the way they relate to the performance of specific individual stocks, RQ2 seeks to identify which indicators are most appropriate for specific individual newspaper stocks. This was done by seeking the correlations between the various indicators and the individual newspaper stocks as reported below:

NSR Average

When individual newspaper stocks' performance are compared to the NSR Average, very high correlations were obtained for Central Newspapers, Gannett Co., New York Times Co., Tribune Co., and Washington Post Co. High correlations were found between the NSR average and Pulitzer Publishing Co., E.W. Scripps, and Times Mirror Co. (Table 4).

TABLE 4
Correlation Between NSR Average and Newspaper Stocks

A.H. Belo	.6920
Central Newspapers	.9259
Dow Jones & Co.	.6713
Gannett Co.	.9497
Harte-Hanks Communications	.6722
Hollinger International	-.1983
Knight-Ridder Inc.	.0735
Lee Enterprises Inc.	-.6636
McClatchy Newspapers Inc.	.5062
Media General Inc.	.5688
New York Times Co.	.9350
News Corp.	-.4277
Pulitzer Publishing	.8799
E.W. Scripps Co.	.8680
Times Mirror Co.	.7866
Tribune Co.	.9431
Washington Post Co.	.9607

NSR Price Index

When individual newspapers stocks are compared to the NSR Price Index , very high correlations were obtained for Central Newspapers, Gannett Co., New York Times Co., Tribune Co., and Washington Post Co. (Table 5). High correlations were found between the NSR average and Pulitzer Publishing Co., E.W. Scripps, and Times Mirror Co.

TABLE 5
Correlation Between NSR Price Index and Newspaper Stocks

A.H. Belo	.6927
Central Newspapers	.9096
Dow Jones & Co.	.6894
Gannett Co.	.9383
Harte-Hanks Communications	.6885
Hollinger International	-.1885
Knight-Ridder Inc.	.0963
Lee Enterprises Inc.	-.6459
McClatchy Newspapers Inc.	.4781
Media General Inc.	.5688
New York Times Co.	.9378
News Corp.	-.4310
Pulitzer Publishing	.8329
E.W. Scripps Co.	.8400
Times Mirror Co.	.7791
Tribune Co.	.9473
Washington Post Co.	.9538

American Stock Exchange (AMEX) Index

When correlations were sought between the AMEX Index and the performance of individual newspapers stocks, only Washington Post Co. showed very high correlation (Table 6). A. H. Belo, Central, Dow Jones, New York Times, Pulitzer Scripps, Times Mirror, and Tribune showed high correlation.

TABLE 6
Correlation Between AMEX Index and Newspaper Stocks

A.H. Belo	-.7336
Central Newspapers	.8657
Dow Jones & Co.	.7124
Gannett Co.	.8882
Harte-Hanks Communications	.6606
Hollinger International	-.1927
Knight-Ridder Inc.	.1900
Lee Enterprises Inc.	-.6243
McClatchy Newspapers Inc.	.3998
Media General Inc.	.6705
New York Times Co.	.8818
News Corp.	-.3914
Pulitzer Publishing	.8848
E.W. Scripps Co.	.8582
Times Mirror Co.	.7136
Tribune Co.	.8967
Washington Post Co.	.9067

Dow Jones Industrial Average (DJIA)

Five of the newspaper stocks correlated very highly with the Dow Jones Industrial Average: Central, Gannett, New York Times Co., Tribune Co. and Washington Post Co. (Table 7). Another 4 were highly correlated: Lee Enterprises, Pulitzer Publishing, E.W. Scripps, and Times Mirror Co.

Dow Jones Transportations Average (DJTA)

Three of the newspaper stocks correlated very highly with the Dow Jones Transportations Average: Gannett Co., New York Times Co., and Washington Post Co. (Table 8) Another 6 were highly correlated: A.H. Belo, Central Newspapers, Pulitzer Publishing Co., E.W. Scripps Co., and Times Mirror Co. and Tribune Co.

TABLE 7
Correlation Between DJIA and Newspaper Stocks

A.H. Belo	-.6583
Central Newspapers	.9449
Dow Jones & Co.	.6383
Gannett Co.	.9712
Harte-Hanks Communications	.6010
Hollinger International	-.2516
Knight-Ridder Inc.	-.0173
Lee Enterprises Inc.	-.7238
McClatchy Newspapers Inc.	.5683
Media General Inc.	.4965
New York Times Co.	.9339
News Corp.	-.4221
Pulitzer Publishing	.8285
E.W. Scripps Co.	.8412
Times Mirror Co.	.7946
Tribune Co.	.9430
Washington Post Co.	.9440

TABLE 8
Correlation Between DJTA and Newspaper Stocks

A.H. Belo	-.7575
Central Newspapers	.8821
Dow Jones & Co.	.6927
Gannett Co.	.9073
Harte-Hanks Communications	.6742
Hollinger International	-.1232
Knight-Ridder Inc.	.1809
Lee Enterprises Inc.	-.6159
McClatchy Newspapers Inc.	.4507
Media General Inc.	.6202
New York Times Co.	.9119
News Corp.	-.3686
Pulitzer Publishing	.8517
E.W. Scripps Co.	.8353
Times Mirror Co.	.7372
Tribune Co.	.8998
Washington Post Co.	.9062

Dow Jones Utilities Average

No newspaper stocks were very highly correlated with the Dow Jones Utilities Average (Table 9), but seven were highly correlated: Central Newspapers, Gannett Co., New York Times Co., Pulitzer, Scripps, Tribune and Washington Post.

TABLE 9
Correlation Between DJUA and Newspaper Stocks

A.H. Belo	-.6955
Central Newspapers	.7924
Dow Jones & Co.	.6788
Gannett Co.	.8464
Harte-Hanks Communications	.6485
Hollinger International	-.3087
Knight-Ridder Inc.	.0519
Lee Enterprises Inc.	-.5680
McClatchy Newspapers Inc.	.3593
Media General Inc.	.4134
New York Times Co.	.8284
News Corp.	-.4822
Pulitzer Publishing	.7098
E.W. Scripps Co.	.7371
Times Mirror Co.	.5932
Tribune Co.	.8256
Washington Post Co.	.8707

NASDAQ Composite Index

Central Newspapers, Gannett Co., New York Times Co., Tribune Co. and Washington Post Co. were very highly correlated with the NASDAQ Composite Index (Table 10). A.H. Belo, Times Mirror, Pulitzer and Scripps were highly correlated.

TABLE 10
Correlation Between NASDAQ Composite and Newspaper Stocks

A.H. Belo	-.7135
Central Newspapers	.9069
Dow Jones & Co.	.6539
Gannett Co.	.9262
Harte-Hanks Communications	.6908
Hollinger International	-.2028
Knight-Ridder Inc.	.0445
Lee Enterprises Inc.	-.6291
McClatchy Newspapers Inc.	.4830
Media General Inc.	.5586
New York Times Co.	.9277
News Corp.	-.4373
Pulitzer Publishing	.8676
E.W. Scripps Co.	.8457
Times Mirror Co.	.7644
Tribune Co.	.9481
Washington Post Co.	.9526

New York Stock Exchange (NYSE) Composite Index

Central Newspapers, Gannett Co., New York Times Co., Tribune Co., and Washington Post Co. were very highly correlated with the NYSE Composite Index (Table 11), and Lee Enterprises, Pulitzer, E.W. Scripps, and Times Mirror were highly correlated.

TABLE 11
Correlation Between NYSE Composite and Newspaper Stocks

A.H. Belo	-.6757
Central Newspapers	.9409
Dow Jones & Co.	.6480
Gannett Co.	.9657
Harte-Hanks Communications	.6229
Hollinger International	-.2239
Knight-Ridder Inc.	.0002
Lee Enterprises Inc.	-.7094
McClatchy Newspapers Inc.	.5573
Media General Inc.	.5067
New York Times Co.	.9413
News Corp.	-.4117
Pulitzer Publishing	.8420
E.W. Scripps Co.	.8521
Times Mirror Co.	.7931
Tribune Co.	.9458
Washington Post Co.	.9524

Standard & Poor's 500 Index

Central Newspapers, Gannett Co., New York Times Co., Tribune Co., and Washington Post Co. were very highly correlated with Standard & Poor's 500 Index (Table 12). Pulitzer, E.W. Scripps and Times Mirror were highly correlated.

Standard & Poor's MidCap

Central Newspapers, Gannett Co., New York Times Co., Tribune Co., and Washington Post Co. were very highly correlated with the Standard & Poor's MidCap Index (Table 13). A.H. Belo, Pulitzer, Scripps, and Times Mirror were highly correlated.

TABLE 12
Correlation Between S&P 500 and Newspaper Stocks

A.H. Belo	-.6763
Central Newspapers	.9335
Dow Jones & Co.	.6494
Gannett Co.	.9621
Harte-Hanks Communications	.6346
Hollinger International	-.2422
Knight-Ridder Inc.	-.0008
Lee Enterprises Inc.	-.6925
McClatchy Newspapers Inc.	.5446
Media General Inc.	.5586
New York Times Co.	.9260
News Corp.	-.4330
Pulitzer Publishing	.8932
E.W. Scripps Co.	.8815
Times Mirror Co.	.7684
Tribune Co.	.9348
Washington Post Co.	.9597

TABLE 13
Correlation Between S&P MidCap and Newspaper Stocks

A.H. Belo	-.7133
Central Newspapers	.9204
Dow Jones & Co.	.6562
Gannett Co.	.9387
Harte-Hanks Communications	.6657
Hollinger International	-.1901
Knight-Ridder Inc.	.0398
Lee Enterprises Inc.	-.6493
McClatchy Newspapers Inc.	.5093
Media General Inc.	.5627
New York Times Co.	.9319
News Corp.	-.4087
Pulitzer Publishing	.8602
E.W. Scripps Co.	.8464
Times Mirror Co.	.7687
Tribune Co.	.9491
Washington Post Co.	.9514

Wilshire 5000 Index

Central Newspapers, Gannett Co., New York Times Co., Tribune Co., and Washington Post Co. were very highly correlated with the Wilshire 500 Index (Table 14). Pulitzer, Scripps, and Times Mirror were highly correlated.

TABLE 14
Correlation Between Wilshire 500 and Newspaper Stocks

A.H. Belo	-.6896
Central Newspapers	.9318
Dow Jones & Co.	.6605
Gannett Co.	.9575
Harte-Hanks Communications	.6432
Hollinger International	-.2241
Knight-Ridder Inc.	.0229
Lee Enterprises Inc.	-.6895
McClatchy Newspapers Inc.	.5298
Media General Inc.	.5285
New York Times Co.	.9379
News Corp.	-.4260
Pulitzer Publishing	.8511
E.W. Scripps Co.	.8544
Times Mirror Co.	.7812
Tribune Co.	.9457
Washington Post Co.	.9541

Discussion

This study set out three specific research questions: how do the Newspaper Stocks Report indicators compare to other market indicators, what indicators are most appropriate for individual newspaper stocks, and what stocks are most alike?

As shown in Tables 2 and 3, the NSR indicators clearly track the other market indicators, but have the best correlations with the broadest market indicators such as the Wilshire 5000. This would indicate that newspaper stocks as a whole perform as other types of stocks as a whole perform because the Wilshire 5000 is one of the most comprehensive and inclusive market indicators.

Although the trends are similar, newspaper stocks as a group performed different from utilities, transportations, and industrial firms as grouped and reported by the Dow Jones averages. Newspaper stocks performed least like the DJ Utilities, which reflects the prices of 15 utilities stocks and was included for analysis because some newspaper observers note that newspaper consumption is a stable not unlike utilities.

Although the Wilshire tends to be more volatile than other indicators and is likely reflective of a range of stock performance, DJ Utilities movement often is based on environmental conditions that specifically affect power companies. Thus, the higher correlation between newspaper stocks and the Wilshire makes sense.

Of particular interest is the fact that about half of the newspaper stocks had relatively low or negative correlations with the NSR Average and NSR Price Index (Tables 4 and 5). These included A.H. Belo Corp, Dow Jones & Co., Harte-Hanks Communications, Hollinger International, Knight-Ridder Inc., Lee Enterprises, McClatchy Newspapers, Media General Inc., and News Corp.

It is tempting to say that the market of value of firms such as Gannett, New York Times Co., Tribune Co., and Washington Post Co. are driving the newspaper indicators. The differences were apparent, however, in both the NSR Average and NSR Price Index which measure performance in different ways. Despite those differences, the companies named in the paragraph showed the same general pattern of difference with both indicators.

That being the case, the divergent paths may be driven by company factors not accounted for by this study. A.H. Belo, Harte-Hanks Communications, Hollinger International, and News Corp., for example, engaged in a great deal of acquisitions and/or under went various structural changes during the time period. Whether those factors produced the differences is unclear. If that is the case, those differences would be expected to disappear or be reduced over a longer period of analysis.

Whatever limitations the NSR indicators have, however, they are less problematic than comparing newspaper stocks to indicators driven be different types of stocks such as utilities or transportations.

If one considers the best indicators for which to compare the performance of individual stocks (the topic of RQ3), no single indicator serves all stocks equally well (see Table 15).The Dow Jones Industrial Average and the Newspaper Stocks Report Price Index were the best indicators for the largest number of stocks (4 and 3, respectively).

In terms of similarities among stocks, 8 firms evidence very high correlations with other firms (Figure 1) and 11 of the firms showed high correlations with other firms. The firms whose performance was most dissimilar from others and did not produce either very high or high correlations were A. H. Belo Corp., Media General Inc., Dow Jones and Co., News Corp., and Knight-Ridder Inc.

Interestingly, as seen earlier, these firms that were dissimilar from the other newspaper firms also failed to correlate with the broadest market indicators.

Table 15
Best Indicators for Specific Newspaper Stocks

	Best	Level	Second Best	Level
A.H. Belo	DJTA	H	AMEX	H
Central Newspapers	DJIA	VH	NYSE	VH
Dow Jones & Co.	AMEX	H	none	--
Gannett Co.	DJIA	VH	NYSE	VH
Harte-Hanks	none	--	none	--
Hollinger International	none	--	none	--
Knight-Ridder Inc.	none	--	none	--
Lee Enterprises	DJIA	H	NYSE	H
McClatchy Newspapers	none	--	none	--
Media General	none	--	none	--
New York Times Co.	NYSE	VH	W5000	VH
News Corp.	none	--	none	--
Pulitzer Publishing Co.	NSRPI	H	AMEX	H
E.W. Scripps Co.	NSRPI	H	NSRA	H
Times Mirror Co.	DJIA	H	NYSE	H
Tribune Co.	SPMC	VH	NASDAQ	VH
Washington Post	NSRPI	VH	NSRPI	VH

These results raise several interesting research questions that are not answerable from the data and analysis in this study:

- Would broader measures such as the Value Line 2000 or Dow Jones Composite indicators provide improvements on the indicators chosen?
- Would the NSR indictors follow the other indicators less closely during less stable periods in the stock market or during economic episodes or periods when other sectors of the economy are affected differently than the newspaper industry?
- What is it about A.H. Belo, Dow Jones & Co., Knight-Ridder Inc., Media General, and News Corp. that makes their performance so dissimilar to the that of the other newspaper firms?

This study presents a starting point for understanding issues and problems in tracking the performance of newspaper stocks, but raises as many questions about stock performance that need to be answered using a longer period of analysis (which will be possible as time progresses and the NSR indicators have existed longer) and by developing a clear means of linking company developments to stock price performance over time.

FIGURE 1
Newspaper Firms Whose Stock Prices Show Very High Correlation

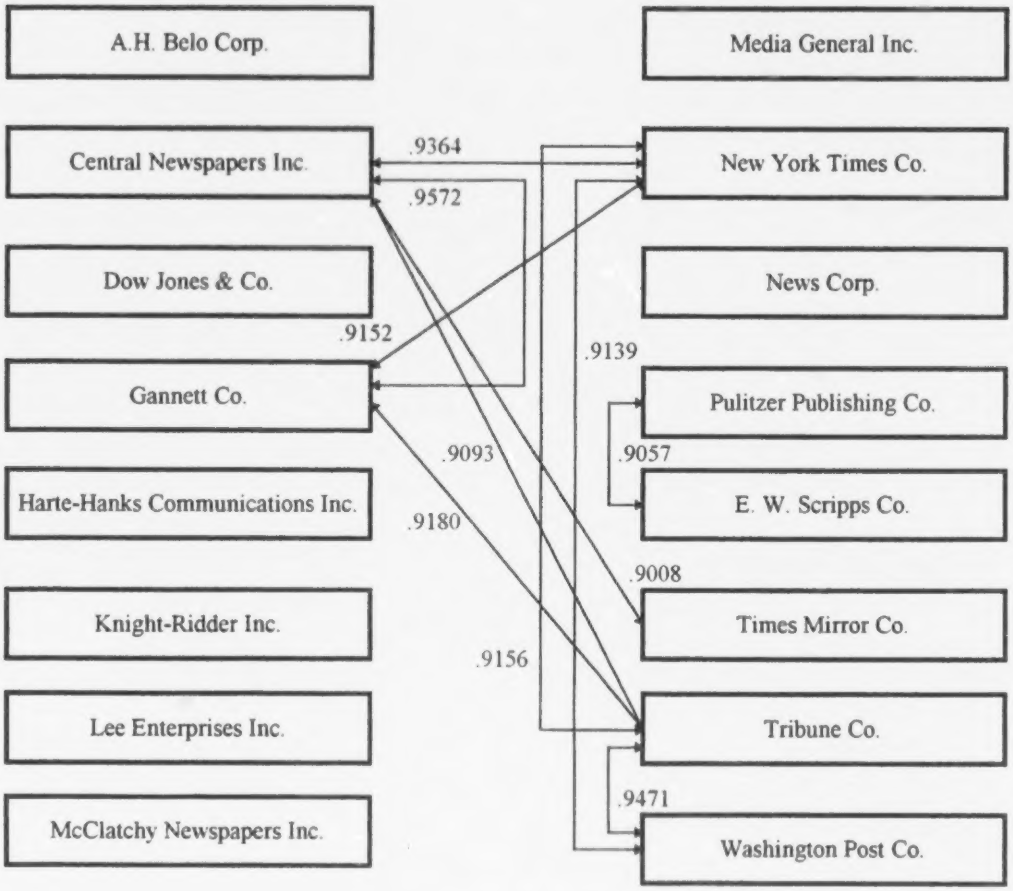
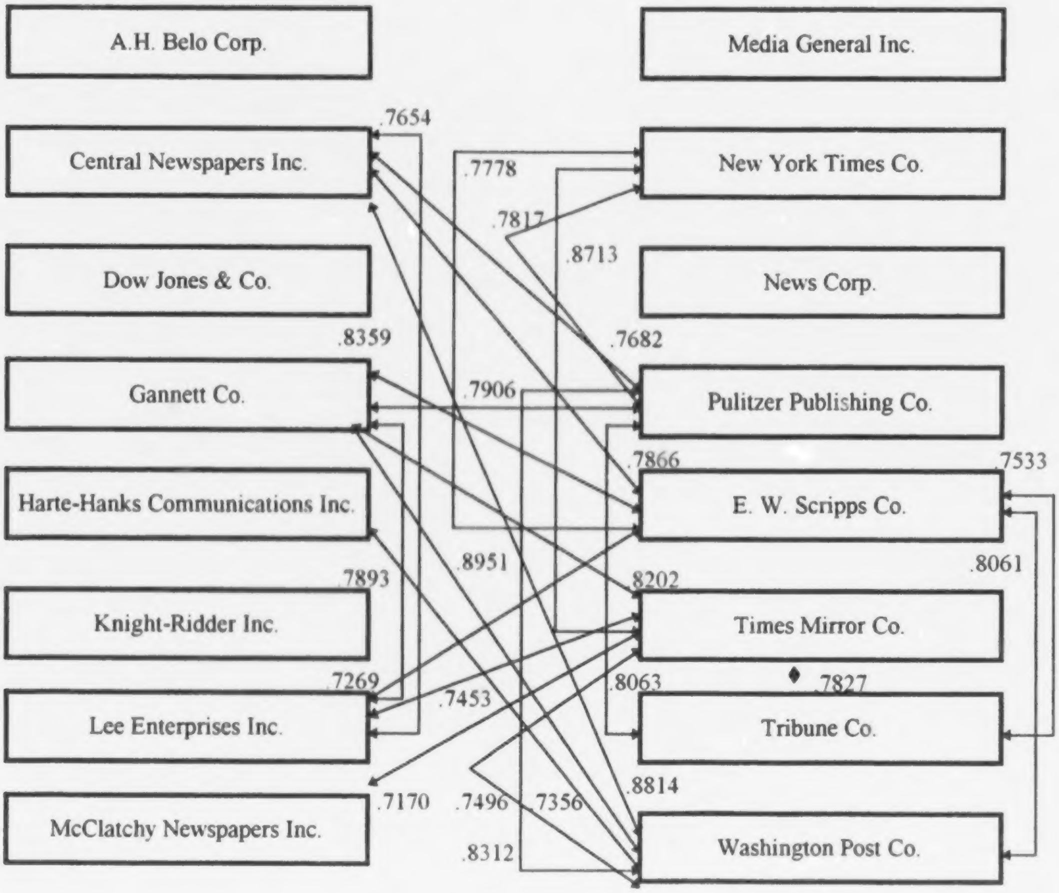

A.H. Belo Corp.
Media General Inc.
Central Newspapers Inc.
.9364
.9572
New York Times Co.
Dow Jones & Co.
News Corp.
.9152
.9139
Gannett Co.
Pulitzer Publishing Co.
.9093
.9057
Harte-Hanks Communications Inc.
E. W. Scripps Co.
.9180
.9008
Knight-Ridder Inc.
Times Mirror Co.
.9156
Lee Enterprises Inc.
Tribune Co.
.9471
McClatchy Newspapers Inc.
Washington Post Co.

FIGURE 2
Newspaper Firms Whose Stock Prices Show High Correlation


A.H. Belo Corp.
Media General Inc.
.7654
Central Newspapers Inc.
.7778
New York Times Co.
.7817
.8713
Dow Jones & Co.
News Corp.
.8359
.7682
Gannett Co.
.7906
Pulitzer Publishing Co.
.7866
.7533
Harte-Hanks Communications Inc.
E. W. Scripps Co.
.8951
.8061
.7893
.8202
Knight-Ridder Inc.
Times Mirror Co.
.7269
.8063
.7827
.7453
Lee Enterprises Inc.
Tribune Co.
.8814
.7170
.7496
.7356
McClatchy Newspapers Inc.
.8312
Washington Post Co.

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Rosse's Model Revisited: Moving from Linearity to Concentric Circles to Explain Newspaper Competition

by

Janet A. Bridges, University of Southwestern Louisiana, and Barry Litman, Michigan State University

with Lamar W. Bridges, Texas A&M University-Commerce

Janet A. Bridges
Associate Professor of Communication
University of Southwestern Louisiana
Box 43650 107 Burke Hall
Lafayette LA 70504-3650
318-482-6142

Barry Litman
Professor of Telecommunication
Michigan State University

Lamar W. Bridges
Professor of Journalism
Texas A&M University-Commerce

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This paper suggests a modification of the common interpretation of Rosse's umbrella model of newspaper competition from the generally demonstrated linear composition to one of concentric circles.

Predicated on the assumptions that newspapers compete in two markets, (1) for circulation and (2) for advertising dollars, and that segmentation within the local market is crucial to a newspaper's survival, Rosse's seminal analysis of the newspaper industry resulted in the umbrella model of newspaper competition (Rosse, 1975; Rosse & Dertouzos,1978). Using an economic model, Rosse & Dertouzos (1978) explained that the newspaper (or product) is developed for broadest appeal in its local market. The model suggests that in a given geographic region competition among newspapers exists among four layers that linearly subordinate both different-sized communities and the newspaper organizations within these communities.

Based on circulation penetration data from the San Francisco and the New York City areas, Rosse suggested that at the highest level, three layers of newspapers are subordinated to an overreaching "umbrella" layer of a central-city metropolitan daily that broadens its coverage and circulation, in effect becoming a regional or even a state paper. The densest circulation of the "umbrella" newspaper is in the central city itself. In each succeeding layer the newspaper is expected to serve a decreasing geographical area; the interests of the target audience (the circulation base) are assumed to become more local or narrow; and the potential advertising also becomes more restricted.

Rosse suggested that the layer #1 daily is attractive to national and regional advertisers and therefore has a high quality content because of its economic status, but that the layer #1 daily doesn't cover local news beyond the metropolitan area very well.

The second layer of the umbrella is what Rosse labeled "satellite" city newspapers, which have a dense circulation in their respective core cities but which also circulate, although less densely, in a regional area abutting the satellite community itself. The circulation of each satellite-city newspaper is discrete from circulation of dailies within other satellite cities. Using the umbrella terminology, each satellite city newspaper is shaded by the central city daily (ies) and in turn shades a third layer of daily newspapers, the suburban press.

The suburban city newspapers of the third layer share a characteristic of the satellite dailies in that their circulation areas do not overlap, but they operate in a much more restricted circulation zone. Rosse showed no competition within the layers, only between the layers. Under the Rosse model, the suburban newspaper is competing with its relevant satellite newspaper and its relevant central city newspaper, but there is little or no overlap in circulation with other suburban newspapers, hence the linear model.

A fourth layer of newspapers includes nondailies, noncontrolled circulation newspapers, shoppers without news, and other formats. Many of these serve communities without a suburban daily newspaper, but others operate within the broader layers of the satellite and/or central city newspapers. Unique to the fourth layer is special-interest content that identifies these newspapers individually.

Owen (1975) and Picard (1989) demonstrated Rosse's umbrella model graphically:

-------------- Figure 1 about here -------------

The graphic model implies that the fourth layer is also exclusive within the third layer, which is appropriate for those publications that focus on a geographic area. But, as Rosse and Dertouzos (1978) said, special-interest and weekly newspapers may serve overlapping geographic areas or may circulate within larger communities already served by metropolitan or satellite newspapers.

Rosse & Dertouzos (1978) illustrated the umbrella model using circulation penetration in the San Francisco Bay area, where two dailies competed in the central city layer. Their figures showed a decline in metropolitan newspaper penetration in the larger city (San Francisco), while penetration of smaller dailies in their respective satellite and suburban communities was increasing. They later explained the central-city decline with four factors: (1) the general-interest content of the metropolitan daily newspapers had been subsumed by television news--competition from another medium; (2) "input" costs, notably newsprint, had increased, causing increases in circulation and content to become more expensive, a problem that increases with the size of the paper; (3) labor costs had risen in the central cities; and (4) urban demographics had changed as population moved to the suburbs and was followed by potential retail and industrial advertisers.

Rosse & Dertouzos's analysis of the New York City market showed the expected decrease in central city penetration and the domination of the central city by three major daily newspapers, but not the predicted exclusive, limited geographic circulation in the second and third layers. However, they felt the umbrella model was supported because the three suburban daily newspapers had stronger penetration in their circulation areas than did the central-city dailies, and the individual New York City newspapers still circulated most densely in the central city. Even so, suburban penetration of the central-city dailies was substantial and specific to certain suburban communities.

Rosse (1975) had suggested that advertising competition would not be "effective" within layers. He predicted that the capability of television to carry national advertising to a broader audience than possible with individual metropolitan newspapers would result in geographic selectivity in circulation as the metropolitan dailies took advantage of economies of scale and pulled back their reach. This selectivity would shrink the reach of these first layer papers in the umbrella and encourage smaller-layer papers to broaden their content.

Underlying the umbrella model seem to be four assumptions, both stated and unstated:

1) circulation penetration will be strongest in the newspaper's home community

2) analysis of penetration will substitute for an analysis of advertising [Rosse & Dertouzos indicated that other factors besides circulation affect advertising, but said

"audiences are necessary before advertising can be sold" and presented circulation as evidence (1978: 148)]

3) as newspapers move farther from layer #1, advertising will become increasingly local

4) as newspapers move farther from layer #1, content will become increasingly local and of lesser "quality." Quality was not defined.

PRIOR STUDIES

Since Rosse presented his umbrella model, other researchers have attempted to duplicate Rosse's results in other geographic areas or have used his model as a base for additional research. Most of the research is based on one of the assumptions.

Circulation-based studies: Tillinghast (1988) tested the umbrella model in southern California where two metropolitan newspapers in Los Angeles competed with two satellite and 20 suburban dailies. The suburban newspapers had heavy competition from the two higher layers in their retail trading zones, less so in their city zones. There was little competition among the suburban dailies during the week, although on Sundays those with Sunday editions had substantial circulation in the city zones of their suburban competitors without the Sunday edition. Still, the metropolitan *Times* had even higher penetration in those suburban communities. Tillinghast concluded that in this southern California market the umbrella model was supported by the inter-layer competition.

Devey (1989) examined circulation in the Boston area from 1945 to 1985 when Boston had as many as three competing metropolitan newspapers. She found that circulation increased faster at the lower umbrella levels than at the metropolitan levels, although *Globe* (the leading paper) circulation increased faster than the lower-level newspapers combined. The trailing metropolitan papers lowered the metro figures overall.

More importantly, circulation in satellite and suburban papers increased proportionately to increases in population. Suburban newspapers grew faster than their population; therefore, Devey suggests that competition is strongest between satellite and suburban newspapers when the metropolitan layer has newspapers that are concentrating on competing between or among themselves. Although she did not replicate Rosse & Dertouzos's penetration analysis in each community, the findings suggest that full umbrella inter-level competition is not a factor in the Boston area, because circulation as a proportion of the existing population is apparently not affected by the metropolitan newspaper situation. However, Rosse's prediction that lower layer papers would grow if metropolitan circulation was pulled back was supported.

Using 900 suburban newspapers from a broader geographic base, an earlier study (Niebauer, et al., 1988) examined the effects of three conditions of central-city competition on both daily and weekly suburban newspapers, and the results were similar to Devey's. The strongest predictor of presence of a suburban newspaper was the population of that suburb. The authors were not testing the umbrella model, but a very weak link between circulation of the metropolitan dailies and absence of a suburban daily newspaper in a community indirectly supports Rosse's model of inter-layer competition, regardless of the intra-layer competition status of the metropolitan newspaper.

Lacy and Davenport (1994) and Lacy and Dalmia (1991) tested the umbrella model using county penetration, loosening the criteria that determine competition. The 1991 study was restricted to Michigan and partially supported the umbrella model. The examination of Michigan newspapers identified some intra-layer competition, contrary to expectations of the umbrella model, and identified a continually changing industry. The 1994 study extended the Lacy and Dalmia concept to the national level and replicated the results of the Michigan study. Nearly half of the counties had daily newspapers circulating from two or more layers and nearly half had two or more newspapers from the same layer. The two studies used a new definition of competition; Rosse's standard of competition was much more restrictive. Lacy and Davenport suggested that newspapers could pursue regional competition, and Lacy and Dalmia suggested that the density of population in an area may affect the umbrella model.

Lacy and Dalmia (1991) suggested that two additional layers should be added to Rosse's model: (1) isolated dailies and (2) isolated weeklies that are too far from the metropolitan area to be reached by a metropolitan newspaper. Lacy (1988) had earlier suggested in a review that a broad layer of national newspapers overlays the first metropolitan layer suggested by Rosse and added a layer of grouped nondailies. Lacy also noted that group-owned suburban daily newspapers form a separate competitive environment between the suburban and weekly layers.

Advertising-based studies: Using national advertising figures to determine elasticity of demand, Busterna (1987) refuted Rosse's and Owen's assertions that competition for national advertising in newspapers comes from competing national media. Busterna did not examine individual markets.

Combined Advertising and Circulation-based studies: If predictions of newspaper executives can substitute for circulation and advertising statistics, a regional study indicated that weeklies (the fourth layer) perceive more competition from suburban than from metropolitan dailies (Lacy, 1984). Suburban publishers predicted that removal of the metropolitan daily newspaper from their umbrella would bring more circulation but not affect advertising; weekly newspaper publishers predicted the reverse. Metropolitan daily executives were more likely to predict an increase in inter-layer competition than were publishers in the lower layers, counter to Rosse's prediction (as Lacy noted). Lacy did not separate the satellite and suburban layers. Further analysis of the data (Lacy, 1985) indicated that lower-layer publishers under competitive metropolitan dailies perceived more advertising competition than those under monopoly metropolitan dailies. The reverse was true for competition for circulation. Advertising competition was seen as more of a threat when the second-layer daily was within 20 miles of the first-layer community.

Content Studies: Content studies have been based on the premise that substitutability of content (both news and advertising) will affect competition and on a concern for quality of content. Using an indirect measure of content, Lacy (cited in Lacy, Fico and Simon, 1988) found that intercity competition was related to the proportion of the newspaper given to news and the proportion of the newshole allocated for local news. Although not specifying where competition fit into the layers, Lacy, Fico and Simon (1989) used path analysis with 21 large newspapers to determine whether competition between cities was related to quality of content. Assuming that a smaller workload for reporters would mean more attention to individual stories and therefore higher quality content, they found that competition from other cities was positively related to fairness in stories but negatively related to reporter workload and by extension to story imbalance.

Attempting to determine cross-elasticity of demand, Lacy and Sohn (1990) compared content about suburban areas in Detroit and Denver metropolitan newspapers and content of nondaily newspapers in the same suburbs with the circulation of each newspaper in the relevant suburb. They also examined display and insert advertising. Comparing similarity of correlations, they found little evidence of substitutability of the metro and weekly newspapers in Detroit. But in Denver, the correlations indicated that display advertising, insert advertising, and local sports coverage were substitutable content. In both metropolitan areas circulation of the suburban weeklies had high correlations with local sports, local editorials and local social news, while the metropolitan dailies had high correlations between circulation and display advertising.

Summary of Direct Tests of the Model: Some of the preceding studies examined elasticity of demand for advertising and variations in newspaper content under differing conditions of competition, but those studies that directly tested the linear umbrella model have:

(1) looked at the effects of metropolitan intracity competition on the umbrella model

(2) examined the inter-layer circulation competition in different geographic

locations

(3) proposed expanding the definition of circulation competition from the city to the county

(4) suggested adding more layers to the model.

The effects of metropolitan intracity competition were mixed. Tillinghast found that with metropolitan intracity competition the umbrella was supported, but Devey's conclusions were just the opposite. Neibauer et al. also found that the metropolitan intracity status did not affect the suburban market. Geographically, in examinations of circulation the model was supported in California, not supported in Boston, and mixed in Michigan and nationally.

While the Lacy and Dalmia and Lacy and Davenport studies may suggest reason to discredit Rosse's assumption of no intra-layer competition (the authors carefully interpret their findings as demonstrating "potential" for intra-layer competition), they do not apply as rigorous a test as did Rosse and Dertouzos, who tested the assumption by comparing circulation density within specific communities (p. 39). Both Lacy and Dalmia and Lacy and Davenport tested the assumption by noting presence or absence of the competing newspaper(s) in a broader geographic area, the county; presence was defined by 5 percent penetration. This measurement makes intuitive sense, but if applied to Rosse's example, would be a reinterpretation of the San Francisco data. Alameda County had four and Contra Costa County had three suburban daily newspapers circulating and would under the Lacy and Dalmia and Lacy and Davenport criterion be illustrative of intralayer competition. Thus the evidence used to demonstrate Rosse's model would refute it. As indicated by Lacy and Davenport, the county aggregate data do not permit conclusions about substitutability of the individual dailies within the county. This caution would also apply to the amount of competition between and among the dailies. While under the Rosse measure there is also no guarantee of the influence of the local daily in a specific community, this consideration is even lower when the county is the standard. There is also growing evidence that in the 1990s, these intra-county dailies may be cooperative rather than competitive (see below).

Additional layers proposed were a national layer, a separate suburban layer of chain-owned dailies or weeklies, an isolated suburban and an isolated weekly layer.

INDUSTRY CHANGES SINCE ROSSE

Since the late 1970s when Rosse presented his umbrella model, the newspaper industry has focused seriously on expanding its penetration into nonlocal areas and on making smaller daily and even weekly newspapers attractive to nonlocal advertisers. The industry is experiencing some attempts by both satellite and suburban papers to circulate beyond their geographic boundaries and even attempts to attract commuters from other geographic areas, because commuters spend much of their time in the work communities and are useful to the advertisers there. The industry also is experiencing extensions of group ownership that combine geographically proximate suburban newspapers into one package for national and regional advertising, and, as Lacy had noted for suburban chains in general, this regional package competes with the other levels of newspapers.

This suburban group ownership can also provide a centralized news office that can provide news common to chain members and take advantage of economies of scale that had formerly been restricted to larger dailies. Rosse had made the assumption that suburban daily newspapers are primarily local in content, but with the availability of wire services and feature syndicates, some suburban papers have little local news as they strive to compete by providing a broader news function for their readers. Owen (1975) had remarked that wire services and feature syndicates affect the "'intraumbrella' effectiveness of competition" because they can exclude a newspaper from their services (p. 53). Rosse had predicted that if lower-layer newspapers could expand their news base, they would compete more intensely with the upper-level dailies. Because smaller dailies generally have lower salaries, maintaining the staff necessary to cover and investigate local news is often a problem and therefore "canned" material is more economical for them.

To demonstrate his umbrella model Rosse had presented an analysis of circulation penetration proceeding linearly from the largest community to the smallest; we are suggesting

-- that changes in technology and in the industry suggest that newspaper competition is no longer explained by a line [in an "umbrella," a spoke] from the lowest level newspaper through to an overriding metropolitan daily (or competitive metropolitan dailies) that shades each succeeding level, as has been the interpretation of Rosse's umbrella. Rather we are suggesting that the newspaper market operates as a series of concentric circles - still under an shading through overlap - but without the linearity (see Figure 2 below).

-- that advertising must be examined separately from circulation. Picard (1993) indicated that newspaper revenue comes from two individual streams, 65 to 80 percent from advertising and 20 to 35 percent from circulation. In addition, as we will demonstrate below, local circulation may not be the determining factor for advertising.

--that circulation analyses will demonstrate that both inter- and intra-layer competition are common and that this competition is not limited to specific linear sublayers.

DATA FOR THE CIRCULAR MODEL

Although newspaper competition comes from nonprint media as well as other newspapers, at least one study (Lacy, 1988) found little impact of intermedia competition on allocation of resources used in the news process. Therefore, this discussion will concentrate on newspapers as a separate competitive system. When circulation is discussed, daily circulation will be the base of analysis.

Circulation: As mentioned above, studies have tested Rosse's model in California, Colorado, Michigan and nationally. They used both county penetration and city penetration. We purposively attempted to find a competitive situation in a different geographic area where satellite newspapers operated, and located competing large dailies in the Tampa Florida region. Audit Bureau of Circulations (ABC) data indicate that the Tampa region has two large daily newspapers, The Tampa *Tribune* and the St. Petersburg *Times*, competing against each other. The *Times* maintains a separate SRDS listing under Tampa as well as under St. Petersburg.[1] No finite definition separates metropolitan daily newspapers from satellite newspapers, but the size of these newspapers compared to metropolitan daily newspapers such as The Dallas

Morning *News*, the San Francisco *Chronicle*, or even the Atlanta *Journal/Constitution* lead us to categorize the two Florida dailies as smaller, satellite dailies. The Miami *Herald* (which circulates in Hillsborough county where Tampa is located) provides weak metropolitan "shade." The Orlando *Sentinel* is also a smaller presence in Hillsborough county.

As Lacy (1988) suggests, a national layer exists.*USA Today* and the Chicago *Tribune* circulate in Hillsborough and Pinellas counties (St. Petersburg is in Pinellas county), creating a separate national layer. Thus under our definition, the layers in the Tampa area are national, metropolitan, satellite, suburban and weekly. Because the retail trading zone associated with the Tampa newspaper covers a finite area, we are interested here in the relationship between and within the satellite and suburban layers.

ABC weekday city-penetration figures for the four suburban daily newspapers in the Tampa designated market are presented in Table 1.[2] If we look only at the raw penetration percentages, the linear interpretation of Rosse's umbrella model is supported. But a closer look indicates that the St. Petersburg *Times* is making inroads into the Tampa city circulation. Although showing only 5 percent penetration, this is one-fifth the amount that the Tampa *Tribune* has for itself in its home community. The suburban layer also has a second interpretation if we look at the overlap in the Sarasota *Herald-Tribune* and the Bradenton *Herald*. Although the Bradenton daily has minimal penetration in Sarasota (less than 2 percent), the Sarasota daily has 14 percent penetration in Bradenton, where the Bradenton *Herald* has 31 percent itself. This is almost half as much penetration as the local daily. Although we could say these figures are not as high as the city-based daily, the penetration is strong and these figures suggest that there is indeed competition for circulation within the suburban layer.

Inter-layer competition is most prevalent in Lakeland (for the Tampa *Tribune*) and in Crystal River (for the St. Petersburg *Times*). In Crystal River, the St. Petersburg newspaper has almost half as much penetration as the local daily.

-------TABLE 1 ABOUT HERE -------

Table 2 presents ABC analysis of proportions of county circulation of daily newspapers in the same Florida market. The Tampa *Tribune* increases its proportion of circulation in Citrus County; there is a minor amount of circulation from the suburban dailies in the satellite layer; but overall the patterns of circulation competition do not change.

Advertising: For advertising competition, we start with general information from SRDS that demonstrates changes in the industry's approach to attracting advertising. The move is to cooperation, especially within layers for nonlocal advertisers, rather than competition.

First, in the early 1980s the newspaper industry adopted the Standard Advertising Units (SAU), a mechanical device that signaled a cooperative attitude among competing daily newspapers, regardless of their placement in the umbrella model. The significance of the SAUs was that newspapers were committing to standardizing their formats to six-columns and standardizing their advertising sizes to accommodate potential advertisers. The individualized formats used prior to the SAU agreement meant that advertisers had to reformat ads to fit into various structures if they wanted to reach readers of different newspapers. Under the SAU format, an ad of one size would fit the same way into all newspapers using the SAUs, thus reducing first-copy costs for advertisers who might wish to advertise in smaller newspapers. The industry also cooperates nationally in six common retail categories to place ads through the National Newspaper Network in combinations of their member daily newspapers. These newspapers operate at all levels of the "umbrella."

More important is the regional focus of the suburban "groups." Newspaper analyst Morton (1997) calls this proliferation of regional groups "clustering," a term he says will be the buzzword of the 1990s. The industry has always had groups of smaller newspapers, but as Morton explains, groups are buying and trading with regionalism as the goal. As the clustering becomes more and more regional, the potential increases for production economies of scale that were available only to the larger newspapers in Rosse's analysis. Consolidated production and administrative activities can reduce costs and enable the group to present an advertising package to retailers whose buying decisions have been becoming more and more national and regional. Morton also suggested that the clustering would improve news content through shared coverage and features.

What these trends imply is that at least at the suburban level competition for advertising across layers is resulting in cooperative ventures within layers beyond the local market. This cooperation creates overlap in the pool of potential advertisers, a contradiction of the assumption behind the linear interpretation of the umbrella model.

The inter-layer competition that is the end result of this cooperation will make the regional package competitive as a unit rather than on a one-on-one basis with larger newspapers. The demographics of the relevant suburban areas could make these clusters very competitive with the overall market of larger dailies. Delivery and newsprint costs still restrict indiscriminate circulation growth. Demographics rather than density may dictate competition.

Returning to the Florida markets, SRDS indicates that four daily and two weekly newspaper regional groups were operating in the state at the end of 1995. Seven weekly newspapers are part of the Tampa Suburban group, providing competition to the Tampa region from the fourth layer of Rosse's model. Five daily newspapers are clustered in the Gainesville area, where metropolitan daily circulation is minimal. The largest proportion in Alachua county (Gainesville) is 2.2 percent for the Orlando *Sentinel*. The Gainesville-area group presented paid daily circulation of 158 thousand and asked $110.29 per inch for a black-and-white ad, or .0698 cents per thousand. This compares to the metropolitan Orlando *Sentinel* , which presented 281 thousand circulation and asked $204 per inch for a black-and-white ad, or .0726 cents per thousand. Demographics and other market factors should have more consideration in this competitive situation than circulation per se.

The Florida groups and group rates indicate that the competition for advertising is not an attempt to eliminate another suburban newspaper but is focusing instead on the ways daily newspapers can cooperate to become more attractive for advertisers outside of the local market. The local market is weak; retailers have been consumed by large chains, and the large chains want more than a small local market for their advertising dollars. By responding to these advertiser needs, the suburban newspapers are moving away from the linear umbrella model and becoming a fluid, changing layer that competes differently under differing regional conditions.

The larger daily newspapers have been experimenting with on-line news delivery and are beginning to see financial returns. When advertising becomes a major component of these web sites, the fluidity of competition will change again.

THE CIRCULAR MODEL

Although the Florida figures are not definitive, combined with prior studies they suggest that the linear model no longer fits the industry as a whole. The proposed circular model accounts for the changing nature of the newspaper market, as compared to the false sense of order and proportion between the layers portrayed by the linear umbrella model. The market is more fluid than it was in 1975, and the area of natural advantage for each newspaper will depend both on the geographic location and on the role the newspaper has chosen to play in its particular market. (Lacy and Dalmia, 1991, for example, had noticed that in Michigan the newspaper industry was continually changing.) The newspaper's choice of a role is a major consideration, as this model accommodates the behavior of the newspaper rather than just its location. This role will also determine the content or product differentiation portrayed by each newspaper. The proliferation of chain ownership has also changed the market, providing the potential for economies of scale for smaller newspapers and reallocation of resources among the larger dailies.

As Figure 2 demonstrates, the circular model retains Rosse's layers, but incorporates them into concentric rings rather than assuming the linearity of layers of larger and larger umbrellas.[3]

---------------------- Figure 2 about here -----------------

In Figure 2 the outer ring would include national newspapers (Lacy, 1988, had also suggested a national layer) of both newspapers with national content such as *USA Today* and specialized/other newspapers that may circulate nationally such as *The New York Times*, *The Wall Street Journal* and the *Christian Science Monitor*. Also included in this ring would be newspapers that circulate in a broad geographic area of the country.

The second ring includes the major metropolitan newspapers that circulate throughout the state or a lesser region than those in the first ring. These newspapers may have zoned editions or may circulate daily with constant material. The rings would support Rosse's assumption that the metropolitan newspapers would be more global in content and would have more circulation density in the metropolitan city.

The third and fourth rings are made up of smaller city daily newspapers, but their area of competition is not restricted. The satellite newspapers could compete either intralayer or interlayer and are expected to expand their reach beyond the satellite central city (note the data for Tampa and St. Petersburg in this study, where the St. Petersburg *Times* is beginning to compete in Tampa, for example).

The suburban daily newspapers also show competition within their layer, in this study demonstrated by the movement of the Sarasota *Herald-Tribune* into the

Bradenton city area. Mobile commuters who are commuting more between suburbs than to central cities (Stepp, 1996) reduce the stability of reader interest in the suburban cities. This commuting trend and geographic clustering of the suburban chains (Morton, 1997) are expected to make the suburban competition even more fluid. Lacy (1988) had suggested that grouped suburban dailies operated between two rings, but that distinction is implied by the fluidity of the rings.

A fifth ring includes weekly newspapers, shoppers, and ethnic and other specialized nondaily newspapers operating within any geographical area throughout the state or region, a concept articulated by Rosse. Newspapers in this ring generally have control within the area they choose to serve. A shopper may operate in a single geographic area, while an ethnic newspaper may circulate regionally or even farther. They generally have little competition in their own niche. Lacy and Dalmia (1991) had addressed the isolated weekly, and Lacy (1988) had noticed the effect of grouped nondailies, but both are incorporated in the nondaily, specialized ring.

The ring model presumes a fluidity of competition that responds to changes in either advertising prices and/or circulation, regardless of the local area of natural advantage. Rosse had predicted many of the changes in the newspaper industry and had articulated scenarios that would result in other changes. This concentric circle model of newspaper competition incorporates these changes.

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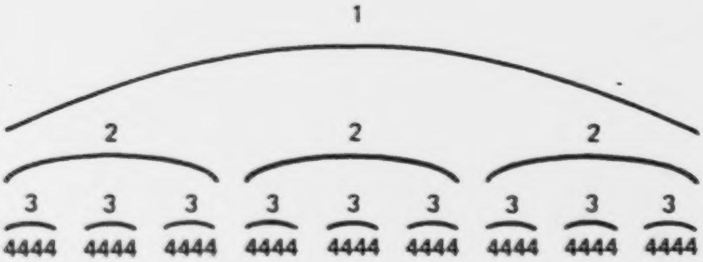
Table 1: Daily Penetration of Tampa Designated Market Cities, 1996 ABC data. (in percents)

City:	Tampa	St.Petersburg	Bradenton	Sarasota	Lakeland	Crystal River
Tampa Tribune	25.45	1.85	1.76	.45	10.24	1.86
St. Ptrsbg. Times	5.05	17.92	1.64	.22	n.a.	4.47
Bradenton Herald	n.a.	n.a.	31.10	1.69	n.a.	n.a.
Sarasota Herald-Trib.	n.a.	n.a.	14.40	41.81	n.a.	n.a.
Lakeland Ledger	n.a.	n.a.	n.a.	n.a.	67.23	n.a.
Crystal River Citrus Cty.	n.a.	n.a.	n.a.	n.a.	n.a.	9.24

Table 2: Proportion of Daily Circulation in Tampa Designated Market Counties, 1996 ABC data (in percents).

County:	Hills borough	Pinnel- las	Mana- tee	Sara- sota	Polk	Citrus
Tampa Tribune	40.6	6.9	2.6	1.4	9.7	11.6
St. Ptrsbg. Times	5.7	61.0	2.0	.2	n.a.	21.3
Bradenton Herald	.0	n.a.	42.4	.8	n.a.	n.a.
Sarasota Herald-Trib.	n.a.	n.a.	19.2	58.0	n.a.	n.a.
Lakeland Ledger	.2	n.a.	n.a.	n.a.	45.3	n.a.
Crystal River Citrus Cty.	n.a	n.a	n.a.	n.a.	n.a.	42.0
USA Today	1.6	1.1	1.3	2.1	.8	.8
Miami Herald	.2	n.a.	n.a.	.2	.0	n.a.
Orlando Sentinel	.1	n.a.	n.a.	n.a.	1.5	.8
Chicago Tribune	.2	n.a.	n.a.	n.a.	n.a.	n.a.
El Vocero/ Puerto Rico	.0	n.a.	n.a.	n.a.	n.a.	n.a.
Charlotte Sun-Herald	n.a.	n.a.	n.a.	1.5	n.a.	n.a.
Ocala Star-Ban'r.	n.a.	n.a.	n.a.	n.a.	n.a.	2.6

Figure 1: Rosse's Linear Umbrella Model of Newspaper Competition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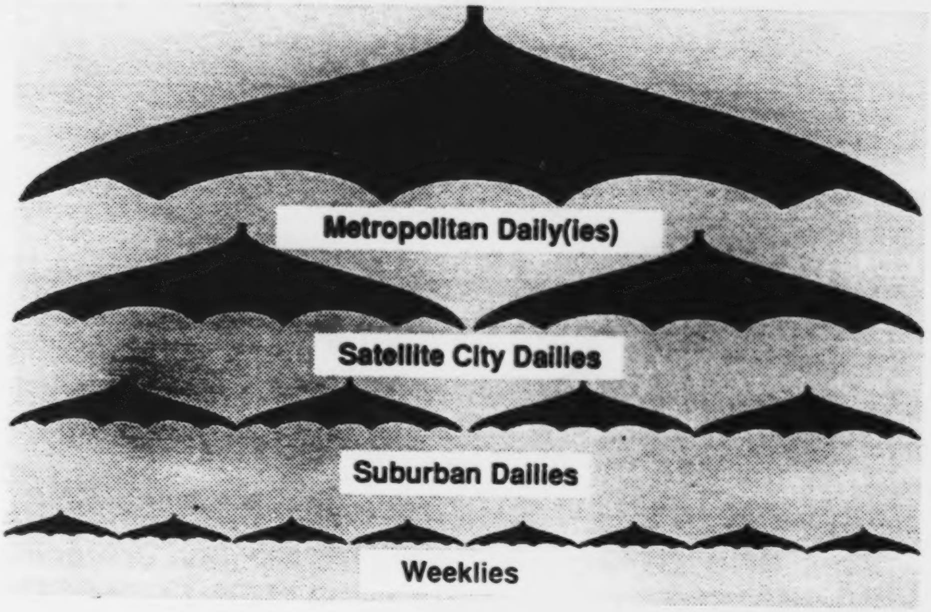
Key:
Level 1 newspaper in large metropolitan center
Level 2 newspapers in satellite cities
Level 3 local dailies
Level 4 weeklies and other specialized media

from Owen (1975), p. 51


Metropolitan Daily(ies)
Satellite City Dailies
Suburban Dailies
Weeklies

from Pickard (1989), p. 30

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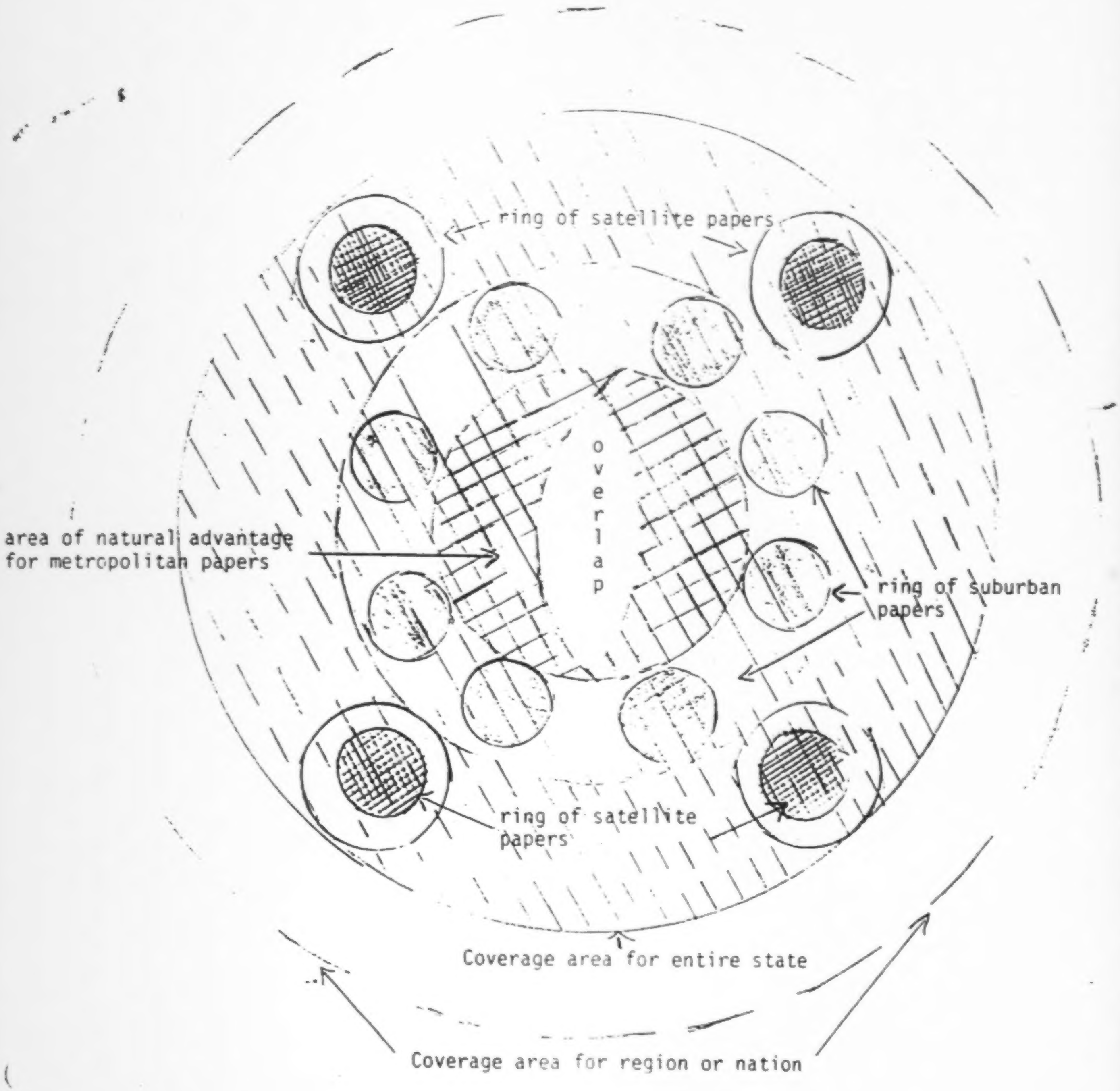
Figure 2: Concentric Circles: The Ring Model of Newspaper Competition


ring of satellite papers
o v e r l a p
area of natural advantage for metropolitan papers
ring of suburban papers
ring of satellite papers
Coverage area for entire state
Coverage area for region or nation

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1. Information attributed to SRDS is from the December 1995 volume. ABC data are from 1966 audit reports.

2. These city-penetration figures were calculated from ABC zipcode distribution data by adding all one-day gross distribution attributed to the relevant cities by ABC and dividing by the 1995 projected number of households in the community, as provided by ABC. These figures may tend to overestimate the penetration, because gross distribution figures may include nondelivered newspapers and a few zipcodes cover more than one community. However, the delivered newspaper figures were estimates.

3.Lacy and Dalmia (1991) cited an unpublished paper by Shikha Dalmia, "Ring Theory as an Alternative to the Umbrella Model of Newspaper Competition: A Study" but did not expound on the information. The paper was unavailable.

PLAYING THE MARKET

Diversification as a Management Strategy Among Publicly Traded Newspaper Companies

John Carvalho, Ph.D. Student

University of North Carolina

P.O. Box 1507, Buies Creek, NC 27506

910-893-1528 <carvalho@camel.campbell.edu>

PLAYING THE MARKET

Diversification as a Management Strategy
Among Publicly Traded Newspaper Companies

INTRODUCTION

Earlier this century, most newspapers were owned by private citizens, often families. That has changed over the years. Faced with disadvantageous inheritance tax laws and the need to finance expensive new technologies, many family-owned newspapers turned to public stock ownership to achieve financial stability. The Dow Jones Co., publisher of the *Wall Street Journal*, was the first to "go public," in 1963.[1] Now, many newspapers in the United States are owned by publicly traded large companies.

For such companies, success is measured not so much by journalistic values such as excellence in reporting, but by "bottom-line" values such as attractive stock performance. Within that definition, standards such as profit margins, dividends earned, and increased share value emerge as relevant, because they attract stockholders.[2]

Publicly traded newspaper companies employ many methods to improve their bottom lines and please investors. Aggressive cost-cutting is one method and has been reported, and criticized, extensively.[3] But that is not the only method employed. Media companies, like their counterparts in other industries, develop diversification strategies relating to the acquisition and divestiture of various properties. They buy and sell individual properties, announce joint ventures and start-ups, and close down unprofitable businesses.

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[1] Philip Meyer and Stanley T. Wearden, "The Effects of Public Ownership on Newspaper Companies: A Preliminary Inquiry," *Public Opinion Quarterly* 48 (1994): 564-577.

[2] David Demers, "Corporate Newspaper Structure, Profits, and Organizational Goals," *The Journal of Media Economics* 9 (1996) 2:4; Jonathan Kwitny, "The High Cost of Profits," *Washington Journalism Review*, June 1990, 28, in Doug Underwood, *When MBAs Rule the Newsroom* (New York: Columbia University Press, 1993): 20.

Aggressive expansion often saddles a company with a heavy debt load: For example, when Gannett purchased Multimedia for $1.7 billion in 1995, the company also agreed to assume $500 million in Multimedia debt.[4] Such moves pressure company management to reduce debt quickly, whether by cost-cutting or by selling off, even closing down, properties. Any of these decisions poses a threat to media outlets and their staff.

Michael Porter, professor of business administration at Harvard University, is among those who promotes the corporate strategy of diversification as one way of enhancing shareholder value. To Porter, a successful company is one that enhances value by entering, at a low cost, attractive ventures that will be better off through the existing company's involvement. This entry can take place through acquisition, joint ventures, or start-ups.[5]

One of Porter's most comprehensive studies examined 33 large American companies over a 36-year period. He found that most of them would diversify by acquisition, joint venture or start-up, but that most of the new activities were eventually divested rather than kept, often at a lower price. Such actions, far from enhancing shareholder value, in fact dissipated the companies' stock value and left them vulnerable to takeovers by corporate raiders.[6]

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[3] See Underwood, 4, 20, 41. In 1995 alone, the Times-Mirror Co. shut down *New York Newsday* and the Baltimore *Evening Sun*, eliminating 2,000 staff positions, to increase its profitability. Other newspapers reported cuts in areas such as circulation and salary increases as cost-cutting measures for that year. (See Tony Case, "Still Strong," *Editor & Publisher*, 6 January 1996, 15-25, 69.

[4] The following information was taken from the "Management Discussion" in the 1996 Gannett Co. Annual Report.

[5] Michael Porter, "From Competitive Advantage to Corporate Strategy," *Michael Porter on Competition and Strategy*(Boston: Harvard Business Review, 1991): 19. It should be noted, as Porter's critics have, that his emphasis on diversification is hardly novel. However, his popularity among business leaders in all industries warrants awareness of the strategies he promotes. (See "Professor Porter Ph.D.: Management Theorists," *The Economist*, 8 October 1994, 1.)

Most large publicly traded newspaper companies in the United States seem to have embraced Porter's strategy over the past two decades, through diversifications in such closely related industries as television, cable, and book publishing, along with newspapers. To the dismay of many media professionals, particularly those in newspapers, the companies have become just as adept at selling off or closing unprofitable subsidiaries -- mainly newspapers.

As is reflected in the literature review, extensive previous research has focused on how public ownership affects decision-making at the local newspaper. Few studies, however, have broadened the perspective to study company-wide management strategies like diversification. Given the increasing centralization of authority at such media companies, management strategy would seem to be an important focus of study.

The purpose of this paper is to apply Porter's model of diversification strategy to publicly-owned newspapers, to answer the following questions: Are such companies aggressively following Porter's model? How does their performance compare to other publicly-traded companies? Which standards should be used to measure such success?

This paper will seek to answer these questions by looking at the diversification actions of the eleven largest publicly-traded American newspaper companies between 1992 and 1996, replicating Porter's methodology. Through that method, the paper will demonstrate whether newspaper companies have embarked on a program of aggressive diversification -- a strategy that could have serious consequences for media professionals and would demand further study.

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[6] Porter, p. 15.

LITERATURE REVIEW

The growth of newspaper chains -- publicly and privately held -- in the 1970s and 1980s led to extensive research within the field of journalism, as scholars tried to determine how these chains' influence on local management affected the quality of newspaper reporting and the diversity of viewpoints represented. An early critic of the growth of chains, Ben H. Bagdikian, warned:

> Each year it is more likely that the American citizen who turns to any medium -- newspapers, magazines, radio or television, books, movies, cable, recordings, video cassettes -- will receive information, ideas, or entertainment controlled by the same handful of corporations, whether it is daily news, a cable entertainment program, or a textbook.[7]

In Bagdikian's opinion, this concentration of media companies threatened the flow of information as these companies stressed profit over public service.[8]

In reviewing the literature, it is important to note that public ownership and group ownership are not necessarily identical.[9] Each involves its unique implications for newspaper managers. Most public ownership research studied issues of short-term profit orientation vs. long-term investment in product quality. Most group ownership studies examined issues of individual newspaper autonomy within a centralized corporate environment that stresses uniform policies and procedures.

Publicly-traded newspaper companies. To many journalists, the capital from public stock offerings has a serious consequence: the involvement of stockholders, whose interests might not match those of journalists. A recent *Columbia Journalism Review* article noted, "The clash between meeting investors' financial expectations and protecting journalistic integrity may be approaching a critical juncture."[10] The article pointed to decisions such as Times-Mirror Co.'s closing down of *New York Newsday* as proof that executives of publicly-owned newspapers were more interested in cost-saving moves that impressed stock analysts than in the survival of newspaper properties.

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[7] Ben H. Bagdikian, *The Media Monopoly* (Boston: Beacon Press, 1980): ix.

[8] Bagdikian, 201.

[9] One important distinction that can be drawn is that many newspaper groups are not publicly owned in that their stock is not traded publicly. Companies such as Donrey and Thomson are owned privately. Thus, they are not required to report transactions, as are publicly traded companies, making research on such companies difficult.

One early study of the effects of public ownership on newspaper management was conducted by Philip Meyer and Stanley T. Wearden in 1983. Meyer and Wearden were concerned that stockbrokers' emphasis on such short-term financial factors as profits was detrimental to newspapers. Measuring attitudes of publishers, editors, and staff members, they found that no newspaper employee, at any level of authority, held the same attitudes as newspaper stock analysts. Given a list of ten yardsticks of success, the stock analysts stressed such factors as management quality, financial health, and earnings consistency, while even publishers -- who would work most closely with the analysts -- instead stressed product quality and editorial quality.[11]

Subsequent research reflected an evolution in philosophy, however. A 1993 study found that publishers who worked for public newspaper companies emphasized profits more, were more attentive to the stock market, and were more interested in short-term returns.[12] A 1996 replication of that study found that newspaper companies with greater "outside control" (defined by stock holdings outside company control) managed in ways that kept stock prices higher. Such companies were associated with higher operating margins, higher cash flow margins, higher returns on equity, lower ratios of expenses to revenue, and higher earnings predictability -- all issues of prime concern to stockholders.[13]

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[10] Tim Jones, "The Day of the Analysts," *Columbia Journalism Review*, November/December 1996, 42.

[11] Meyer and Wearden, 570.

[12] William B. Blankenburg and Gary W. Ozanich, "The Effects of Public Ownership on the Financial Performance of Newspaper Corporations," *Journalism Quarterly* 70 (Spring 1993) 1: 68-75.

One 1996 study, however, did examine the effects of public ownership on publisher autonomy. It found that publishers of privately owned newspapers reported more freedom to make personnel decisions without seeking approval from the home office than their counterparts on publicly owned newspapers. No difference was noted concerning minor managerial decisions or decisions relating to capital expenditures.[14]

Another study examined the role of institutional stock investors -- insurance companies, pension plans, and investment firms. Such investors were drawn to the newspaper industry "because it is a stable industry that has produced steady profits at almost twice the rate of manufacturing firms."[15] The study identified several warning signals of potentially unhealthy influence by institutional investors: greater than 50 percent ownership by institutional investors, greater than 5 percent ownership by a single institutional investor, and representation by institutional investors on executive boards. Several newspaper companies reflected all of the warning signals; several reflected none.[16]

Group ownership. Other studies have looked at the effect of ownership by groups, also known as "chains," on local newspapers. These studies have tried to determine the extent to which centralized group policy filters down to influence, even control, individual local newspapers. The concern is that such centralization diminishes the newspaper's commitment to community service.

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[13] Stephen Lacy, Mary Alice Shaver, and Charles St. Cyr, "The Effects of Public Ownership and Newspaper Competition on the Performance of Newspaper Corporations: A Replication and Extension," *Journalism & Mass Communication Quarterly*, 73 (Summer 1996) 2: 332-341. This study also introduced competition as a factor in management decision making.

[14] Martha N. Matthews. "How Public Ownership Affects Publisher Autonomy," *Journalism & Mass Communication Quarterly*, 73 (Summer 1996) 2:342-353.

[15] Robert G. Picard, "Institutional Ownership of Publicly Traded U.S. Newspaper Companies," *The Journal of Media Economics*, 7 (1994) 4: 64.

[16] Picard, 49-64.

One earlier study compared the "driving objectives" of organizations, as stated by management, between publishers at group-owned and individually-owned newspapers. It found that publishers at group-owned papers were more likely to identify profit as a driving objective, while publishers at individually-owned newspapers mentioned community service.[17]

Other studies, however, found no difference between group-owned and individually-owned newspapers, in such areas as publisher autonomy[18] and organizational professionalism[19]. In the former study, top editors at larger newspapers reported more freedom to make decisions that improved content, regardless of group or individual ownership. In the latter, two size-related factors -- the size of the newspaper group and the number of newspapers owned by the group -- affected organization professional practices more than group ownership, when compared to individual ownership.

Some authors have criticized the trends toward both public and group ownership. In his book, *When MBAs Rule the Newsroom*, Doug Underwood criticized newspaper managers for their emphasis on the "bottom line." Such managers' response to declines in circulation seemed to be an obsession with marketing studies and reader surveys.[20] For Underwood, the solution was an abandonment of the profit-oriented marketing techniques of group-owned and publicly-owned newspapers, and an emphasis on newspapers' traditional approach to reporting:

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[17] David P. Demers and Daniel B. Wackman, "Effect of Chain Ownership on Newspaper Management Goals," *Newspaper Research Journal*, 9 (Winter 1988): 59-68.

[18] David Pearce Demers, "Effect of Corporate Structure on Autonomy of Top Editors," *Journalism Quarterly*, 70 (Autumn 1993) 3: 499-508.

[19] Randal A. Beam, "The Impact of Group Ownership Variables on Organizational Professionalism at Daily Newspapers," *Journalism Quarterly*, 70(Winter 1993)4:907-918.

> The newspapers that devote themselves to filling their pages with real news, enterprise reporting, good writing, and intelligent analysis will survive and prosper, I am convinced, despite the pressures from the marketplace, the beguilements of video culture, and the abandonment of reading by some segments of the public.[21]

None of the previous studies, however, have examined newspaper companies on broader management strategies, such as diversification of media properties. Most criticisms have centered on such issues as declining circulation and local newspaper autonomy, without looking at management strategies that affect financial decisions. While issues of local content and penetration are certainly relevant, diversification strategies can have even more of a serious impact on local media, through pressure from the parent company to demonstrate strong financial performance or risk closure.

The writings of Michael E. Porter. A professor of general management at the Harvard Business School, Michael E. Porter has published several influential books on business competition and strategy. His books include *Competitive Strategy* (New York: Free Press, 1980), *Competitive Advantage* (New York: Free Press, 1985), and *The Competitive Advantage of Nations* (New York: Free Press, 1990). Although many critics note that Porter's teachings on strategy lack originality, his emphasis on strategy over management topics found a ready audience during the stock market boom of the 1980s.[22] His free-market writings also drew the attention of President Ronald Reagan, whom Porter served as an economic adviser.[23]

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[20] Underwood, especially Chapter 2, "When the Marketers and Managers Move In."

[21] Underwood, 179.

Researchers have applied Porter's principles within scholarly studies of other industries. One such study looked at nine major United States airlines, to determine how they applied Porter's strategies to position themselves for competitive advantage. The strategies in this case were cost leadership, product differentiation, and strategic focus. The study identified five airlines that were achieving competitive advantage, and four that were not.[24]

Another such study applied Porter's principles to the hospital industry. That study added the dimension of applying Porter's cost leadership and product differentiation strategies within the changing organizational environment that characterized health care industries. They found that the differentiation strategy was more appropriate than cost leadership with hospitals, providing hospitals with competitive advantage and improved financial performance.[25]

No studies, however, have applied Porter's principles of diversification to publicly owned media companies. This paper will add to the existing literature on publicly-owned newspaper companies and on the applicability of Michael Porter's teachings on diversification and competitive advantage to newspaper companies.

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[22] Walter Kiechel, "Case of Michael Porter Superstar," *Fortune*, 9 November 1987, 39. The article estimated Porter's book sales to be 200,000 for *Competitive Strategy* and 120,000 for *Competitive Advantage*, as of 1987.

[23] Richard Ryan, "*The Competitive Advantage of Nations*" (book review), *National Review*, 9 July 1990, 46.

[24] James A. Kling and Ken A. Smith, "Identifying Strategic Groups in the U.S. Airline Industry: An Application of the Porter Model," *Transportation Journal*, 35 (Winter 1995) 2: 26-34.

[25] Bruce T. Lamont, Dan Marlin, and James J. Hoffman, "Porter's Generic Strategies, Discontinuous Environments, and Performance: A Longitudinal Study of Changing Strategies in the Hospital Industry," *Health Services Research*, 28 (December 1993) 5: 623-640.

METHODOLOGY

This paper looks at the diversification activities of the largest publicly traded newspaper companies. The newspaper companies were selected according to the following criteria. First, the companies had to be publicly traded on stock exchanges located in the United States. These companies were identified by using the 1996 edition of *Standard & Poor's Register of Corporations.* The list was further refined to identify the eleven largest newspaper companies by aggregate daily circulation, using the 1996 *Editor & Publisher International Yearbook.* That yielded the following eleven newspaper companies.

Table 1
Top Eleven Publicly-Owned United States Newspaper Companies by Circulation

Company Name	Newspapers Owned	Combined Circulation
1. Gannett	92	6,010,092
2. Knight-Ridder	31	3,744,181
3. Times-Mirror	10	2,409,781
4. New York Times, Inc.	20	2,335,765
5. Dow Jones & Co.	1	1,763,140
6. Scripps-Howard	12	1,236,242
7. Cox Newspapers	20	1,142,348
8. McClatchy	12	959,128
9. Tribune Co.	5	880,535
10. Washington Post	2	844,966
11. Central Newspapers	8	804,016

To evaluate these companies' commitment to diversifying, the profile in Porter's study[26] was applied, with modifications. Porter's diversification profile measured the corporation's entries into new industries, then segmented out those entries as joint ventures, start-ups, and acquisitions. A joint venture was a new project started with another company; a start-up was a new project initiated only by one company; and an acquisition was a purchase of an existing property.

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[26] See Exhibit I, "Diversification Profiles of 33 Leading U.S. Companies" and Exhibit II, "Diversification Performance in Joint Ventures, Start-Ups, and Unrelated Acquisitions," in Porter, 16, 22.

Because of his study's wide time period, Porter was able to trace the history of each venture. That allowed him to trace which acquisitions were divested over the same period.[27] To apply such a methodology directly to newspaper companies ignores realities specific to the industry. First, many newspaper companies are only recent entrants into the public ownership arena; in addition, many have only recently adapted their strategy to incorporate acquisitions.

For these reasons, this study will look at the performance of newspaper companies from January 1992 until December 1996. Also, this study will not be limited to ventures that were initiated and then ended within the five-year period. Instead, this paper will track all acquisitions, start-ups, joint ventures, and divestitures over the five-year period. From a media management standpoint, it could be argued that any divestiture is relevant to a media company's overall performance, regardless of whether that property was held for five years or 50 years. In addition, many recent newspaper closures represent properties that had been published for many years.

Although companies have diversified into many non-media areas, this paper will only look at transactions involving media-related properties: newspapers, magazines, broadcast stations, cable companies, book publishers, and media software projects. The acquisitions, start-ups, joint ventures, and divestitures were tracked according to articles in trade publications that specialized in reporting on media industries. The publications included *Editor & Publisher*, *Broadcasting & Cable*, *Publishers Weekly*, *Advertising Age*, *Variety*, and *MediaWeek*. Because publicly traded companies are required to publicize any developments that affect stock performance, those trade publications are reliable sources for information on such moves.

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[27] Porter, 16-17.

For this study, the unit of measurement is the media property purchased or divested. In other words, Gannett Co.'s $1.7 billion purchase of Multimedia in 1995 would be measured as seventeen transactions (ten daily newspapers, five television stations, and two radio stations). Cox Communication's $9 million purchase of a Chicago radio station in 1993 would count as one transaction. While Gannett's decision to purchase Multimedia represents only one decision, to treat it as only one transaction creates a measurement problem, given the practice of selling off media properties after purchasing a conglomerate. Thus, should Gannett sell two daily newspapers originally owned by Multimedia, the net diversification would be a value of -1, even though Gannett still grew by fifteen properties from the transaction. The method also is valid given this paper's purpose -- to compare diversification efforts using equal standards.

Combination AM-FM operations, however, still were counted as single transactions. In addition, so-called "swaps" were counted as two transactions: an acquisition and a divestiture. The reasoning behind this decision is that a swap does involve two decisions for a company -- which units to give up and which to accept.

RESULTS

A total of 234 transactions were reported. The companies that made the most transactions had holdings in the cable industry during this period, although Times-Mirror and Scripps divested theirs. Only the last two companies can be described as the least diverse, with their holdings concentrated in newspaper properties.

Table 2
Top Eleven Publicly-Owned United States Newspaper Companies Ranked by Number of Diversification-Related Decisions (1992-96)

Company Name	Decisions
1. Cox Newspapers	82
2. Gannett	46
3. Tribune Co.	31
4. Times-Mirror	24
5. New York Times, Inc.	14
6. Knight-Ridder	13
7. E.W. Scripps	11
8. Washington Post	8
9. Dow Jones & Co.	3
10. McClatchy	1
10. Central Newspapers	1

To replicate Porter's diversification chart, it is necessary to break down the diversification decisions in two different ways. The first is to compare entries into new industries (acquisitions, start-ups, and joint ventures) with exits from existing industries (divestitures).

Table 3
Top Eleven Publicly-Owned United States Newspaper Companies Diversification-Related Decisions: Exits vs. Entries (1992-96)

Company Name	Entries	Exits	Total
Cox Newspapers	66	16	82
Gannett	28	18	46
Tribune Co.	27	4	31
Times-Mirror	12	12	24
New York Times, Inc.	7	7	14
Knight-Ridder	10	3	13
E.W. Scripps	7	4	11
Washington Post	6	2	8
Dow Jones & Co.	2	1	3
McClatchy	1	0	1
Central Newspapers	1	0	1

One way to interpret these various transactions, to make them more meaningful, is by subtracting the exits from the entries, to determine the newspaper company's "net diversification" over the five-year period. Two companies -- Gannett and Times-Mirror -- showed a lower net diversification value, compared to the transactions reported. In both cases, the companies aggressively divested themselves of broadcasting properties. Cox Newspapers and the Tribune Co. showed, by far, the most active diversification of the companies in this study, mainly through acquisition of broadcasting and cable properties. (It is interesting to note that no company decreased in the number of media properties owned.)

Table 4
Top Eleven Publicly-Owned United States Newspaper Companies
Net Diversification (1992-96)

Company Name	Entries	Exits	Net
Cox Newspapers	66	16	50
Tribune Co.	27	4	23
Gannett	28	18	10
Knight-Ridder	10	3	7
Washington Post	6	2	4
E.W. Scripps	7	4	3
Dow Jones & Co.	2	1	1
McClatchy	1	0	1
Central Newspapers	1	0	1
Times-Mirror	12	12	0
New York Times, Inc.	7	7	0

Another way of interpreting these decisions is to look at the "entry" decisions to see which were more popular: acquisitions, start-ups, or joint ventures. It is not surprising that acquisition of existing properties was the most popular diversification method.

Table 5
Top Eleven Publicly-Owned United States Newspaper Companies
Entry Decisions, by Category (1992-96)

Company	Acquisitions	J. Ventures	Start-Ups	Total
Cox Newspapers	59	5	1	65
Gannett	24	3	1	28
Tribune Co.	22	4	1	27
Times-Mirror	8	2	2	12
Knight-Ridder	7	2	1	10
E.W. Scripps	3	2	2	7
New York Times, Inc.	7	0	0	7
Washington Post	6	0	0	6
Dow Jones & Co.	2	0	0	2
McClatchy	1	0	0	1
Central Newspapers	1	0	0	1
TOTAL	140	18	8	166

DISCUSSION

It would appear that the larger media companies have adopted Michael Porter's strategy for enhancing shareholder value by diversifying. Seven of the eleven largest companies averaged at least one such decision each year. In addition, the fact that the top newspaper companies acquired more properties than they divested indicates that Bagdikian's fear -- the concentration of media outlets within a few conglomerates -- might be coming true.

But are such diversification strategies being administered wisely? Are some companies putting their media properties, including newspapers, at risk by expanding too aggressively? Within the companies in this study, the strategies themselves vary widely. While companies like Gannett, Cox, and Tribune Co. are aggressively entering such fields as cable and online, other companies, such as Knight-Ridder and Times-Mirror, appear anxious to exit cable television, despite its apparent promise for uniting the telephone, Internet, and television industries by providing a single point of entry into homes accessing diverse new technologies.

But success is not only measured by the diversity of a company's activities; an important component is what that company does with these diverse activities. Divestiture is, in one sense, an admission that, for whatever reason, a company is better off without a property (and vice versa).

Studying diversification would provide future media researchers with many promising topics. It would be meaningful to relate diversification-related decisions to stock prices, to determine whether the decisions made by large media companies indeed find favor with Wall Street. The decisions outlined in this chapter could be studied in greater detail, using more sophisticated units of measurement instead of the media properties involved, and a longer time frame. In addition, circulations at the various newspapers owned by the companies could be compared, for any relation between company diversification and circulation. From a professional perspective, journalists at these companies could be surveyed to see how diversification affects job satisfaction -- especially in areas such as perceived job security.

For publicly traded media companies to succeed, they must play by the same set of rules that have governed American industry for decades. For media researchers concerned about whether these rules have a negative effect on the content of the news media, it might be more enlightening to turn their attention to the executive suite. If newspaper company executives continue dancing to Porter's tune, the consequences could be serious indeed for newspapers.